December 21, 2015

Attn:

Ms. Victoria Proehl

Community Development Manager

4035 Broadway Grove City, OH 43123

614.277.3000

Regarding:

Final Development Plan

#201509280073

Farm Banks Way, Grove City

The zoning of adjacent parcels should be added to plans.

Response: This has been added to sheet C1.0

2. The City Project Number and names and addresses of owners should be added to the title block.

Response: This information has been added to the title block.

3. The proposed sidewalk along Farm Bank Way should connect to the sidewalk along the east side of the building. Response: A sidewalk connecting the public walk to the front entry has been added to the site plan.

4. The Area Calculation on sheet EE-1 (building elevations) should be expanded to detail all proposed materials on all sides of the structure and the percentage of each on each side as well as overall percentages, to ensure compliance with the architectural standards set forth in the approved zoning text for the site.
Response: The Area Calculations have been expanded to show the percentages of material on each elevation.

5. The project narrative from the Lot Split application should be submitted with revised materials for this application.

Response: We have an updated narrative with additional information as requested for the Special Use application.

- 6. All stormwater should be routed to the existing pond on site, which should be brought up to standards as required in the 2015 Stormwater Manual, as Staff is not supportive of draining into the dry basin on the eastern edge of the site as proposed. Since the pond to the north is shared between several sites, an agreement outlining the shared use and future maintenance of the pond should be drafted and submitted.
 Response: The depressed area, east of the parking lot, is not intended to serve as a dry detention basin. There is a swale on the south side of the parking lot that is graded to flow to storm structure 2.
- 7. Staff has concerns with the proposed drive going into the building on the northwest corner. Please provide more details and an explanation of this drive.

Response: The proposed drive going into the building on the northwest corner leads to an overhead door.

8. The drive aisle is within the 30' setback on the north property line. Staff is supportive of this deviation, but please list it in the narrative.

Response: The setback restriction listed as 30'-0" is for the north-most property line of this PUD are, as it borders the Urbancrest residential neighborhood. In the instance of the north property of this parcel, refer to #7 of the "Yard and Setback Requirements" section of this Ordinance which lists interior side yard setbacks as 10'-0".

9. Details should be submitted for the proposed 8' fence.

Response: Please refer to enclosed fence details on sheet SP-2.

10. Details should be submitted for the proposed dumpster enclosure. The enclosure should be finished in materials to match the primary structure and should have stained wood gates.

Response: Please refer to enclosed dumpster enclosure details on sheet SP-2.

11. Signage details can either be reviewed as part of this application or through the Building Division at a later time. If reviewed now, details should be provided for all proposed signage throughout the site.

Response: No details are available of the signage at this time. Signage will need to be reviewed at a later time.

12. The recorded ingress/egress access easement agreement should be submitted.

Response: This will be submitted as a separate document by Dublin Building Systems.

13. A separate 8.5x11" materials sheet should be included, listing manufacturer, color, and material for all exterior finishes and fence.

Response: Please see enclosed materials schedule.

14. A material sample board should be submitted with samples of all proposed exterior finishes and proposed fence. Response: Please see enclosed material sample board.

Building Division (Laura Scott, 614-277-3086)

15. Building dimensions are not shown on plans.

Response: Building dimensions have been added to sheet C1.0.

16. Proposed Simtek fence may require gates/exits per code based on the location of egress doors.

Response: While not required for egress out of the building, gates have been added for cross connectivity and better functionality of the Outdoor Play Area.

Urban Forestry (Jodee Lowe, 614-277-1103)

17. 1136.05(b): Tree Inventory needs to be done for existing trees 6" dbh or larger; plans need to show trees that will be removed and preserved during the construction process.

Response: A tree inventory has been completed and is included in the engineering drawings.

18. 1136.06(b): Rear and Side Yards Adjacent to Compatible Use Districts-one 2" minimum caliper tree and two 18" height deciduous shrubs are to be planted for each 40 lineal feet of property line (current numbers on landscape plan fall short of total number needed.

Response: Additional plantings have been added.

19. 1136.06 (d): Interior Vehicular Use Areas- requires that all islands have one 2" minimum caliper tree planted (the Northeast island needs a tree planted there).

Response: Island has been removed.

20. 1136.08: Screening of Service Structures-there needs to be a note on the plans stating that all service structures shall be screened per this code. There needs to be landscaping around the dumpster and mechanical structures that are located to the south.

Response: A note has been added to sheet L1.1.

21. 1136.09: Other Planting Requirements-Free Standing Signs- signs are to be set in landscaped areas. These areas are to be a minimum of 2' larger than the foundation of the sign on all sides and are to be landscaped with permanent plant material.

Response: Plantings have been added around the proposed signage.

- 22. 1136.09(d): Tree Planting Typical-add that wire cages will be removed from the root ball of the trees by 50%. Response: A note has been added to sheet L1.1.
- 23. 1136.11: Grass and groundcover- show on the landscape plans where sod or hydro-seed will be used. Response: A hatch has been added to sheet L1.0 to denote areas to be hydro-seeded.
- 24. Plant Schedule needs to show Junipers 36" in height at installation due to being used as screening for Parking Spaces.

Response: Plant schedule has been updated.

25. Street trees will be planted in the Right of Way by The City of Grove City.

Response: Street trees shown on the plan have been noted to be planted by the City of Grove City.

Service Department (Cindi Fitzpatrick, 614-277-1110)

12,000 CF.

- 26. Entrance Drive is beyond the property line. Could/should the lot split include the entire drive aisle and an access agreement be arranged if/when the rest of the property in the area develops?

 Response: Consideration will be made.
- 27. Sidewalk connectivity from Broadway would be provided to the site if sidewalk was extended to the north to tiein to the existing sidewalk at 3149 Farm Bank Way. Response: Acknowledged.
- 28. Site should be compliant with the new Grove City Stormwater Design Manual and updated stormwater codemodifications to the pond may be required to meet these updated stormwater regulations. A maintenance agreement for the pond should be created between the two property owners Response: The previous design documents show that 12,000 CF of storage was provided for future development. Our detention calculations show that the proposed development does not require more than

- 29. Provide referenced SWMP that shows pond was sized for this development Response: Page 3 of the enclosed pdf shows that volume for quality treatment and quantity storage was provided for future development.
- 30. Pavement sheet flow with curb cuts-at curb cuts rock channel protection should be installed to prevent erosion at these drainage points

Response: This has been added to the plans.

31. Drainage ditch should be piped between structures 2 & 3

Response: This is not required per code. We would like to keep this open to provide some additional water quality treatment to the water before it enters the pond.

Engineering, EMH&T (Erik Meininger, P.E., 614-775-4806)

- 32. Stormwater calculations were received and a preliminary review was completed. All final design calculations shall be provided for review with detailed engineering/construction plans. The intent on this submittal and review is to ensure that the Developer is making proper accommodations onsite to address stormwater quality and management. Detailed review will be concurrent with final site plans/construction plans.

 Response: Acknowledged.
- 33. The Developer shall show future access (from shared access drive) to parcel to the north. The City would like to better understand the future geometry of the shared access drive and the entrances to the specific parcels parking/site access.

Response: A future access to the northern property has been added to the plans.

34. It is recommended that the Developer relocate water service from under the access drive. It may be better suited to locate this water service south of the sanitary tap to minimize the amount of the water service alignment which is under pavement. All water services and taps will be required to be reviewed and approved by the City of Columbus, Division of Water.

Response: The proposed water service has been realigned.

- 35. Storm sewer headwalls/endwalls shall have decorative stone facing.

 Response: Note 3 on sheet C1.0 has been updated to state that all headwalls and endwalls must have decorative stone facing per Grove City Standards.
- 36. Decorative fencing shall be provided between the access drive and the pond.

 Response: Please identify where fencing around a private pond is specifically required.
- 37. The existing condition of Farmbank Way is in poor condition and the proposed improvements/traffic will impact this road. It is requested that the Developer shall deposit with the City appropriate funding to improve/resurface Farmbank Way along frontage of project. This will be a future City investment into Farmbank Way. (100' frontage x 24' pavement x 50% = 1200 sf (133 SY) of resurfacing...It is estimated that this cost would be \$15 SY or approximately \$2,000.

Response: Acknowledged.

Grove City Division of Police (Jeff Pearson, 614-277-1709)

38. No comments received. Response: n/a

Responses.docx

Jackson Township Fire Department (Tammy Green, 614-945-5043)

- 39. Plans show a canopy in the front of the building with no detail on height, and the north access drive is only twelve (12) feet wide and lined with shade trees.
 - a. Please provide a detail of the fire apparatus drive access around the parking lot ((a) 503.1.1 Buildings and facilities. All fire apparatus must be able to maneuver the parking lot for emergency responses and have access to all portions of the building within 150 feet of the access drive).
 Response: The civil engineer has verified that there is sufficient space for fire truck access. Please refer to enclosed Autoturn Exhibit.
 - b. Widen the north drive to a minimum of twenty (20) feet and provide details on the canopy height (a) 503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet, exclusive of shoulders, and an unobstructed vertical clearance of not less than 13 feet 6 inches. Response: The proposed drive has been widened.
- 40. (a)507.5.1 Where required: Where a portion of a facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet from a hydrant access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.
 - c. Without including the fence obstructions, the distances from the closest 2 hydrants are approximately 605 feet and 725 feet; therefore, an on-site fire hydrants may be required.
 Response: Kleingers will work with Jackson Township Fire to determine if a hydrant is needed.

| Please feel free to contact me with any comments or questions regarding this project. Thank you for your time. |
|--|
| Sincerely, |
| Matthew Althouse |
| |

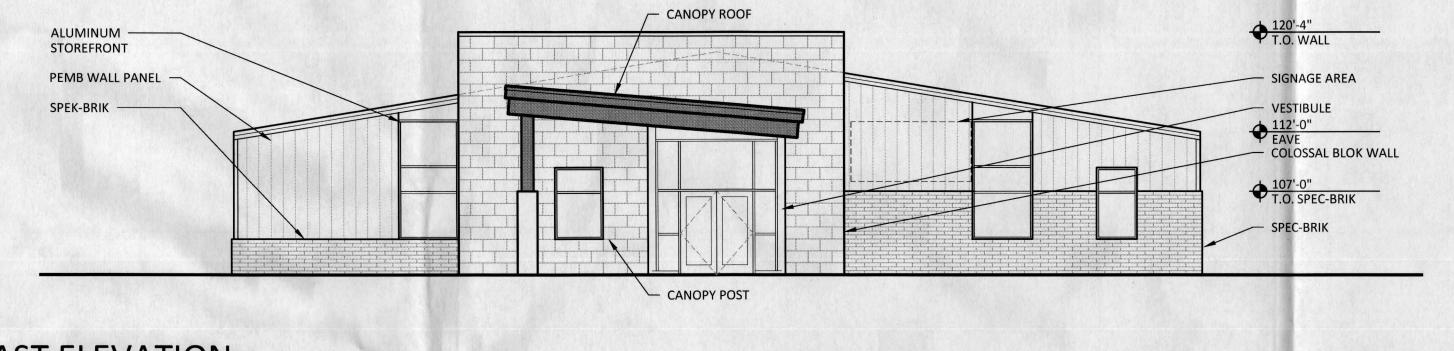
R:\Projects\Dublin Building Systems\DBS011 - Pinnacle Pet Play & Stay\8-Admin\Permitting\RED Response Letters\zoning\2015-10-19_DBS011_Development Plan

| MARK | DESCRIPTION | MANUFACTURER | COLOR/TEXTURE | | |
|------|------------------------|------------------------|--|--|--|
| | SPEC BRIK | OBERFIELDS | 2015 HOUSTON BLEND | | |
| | CONCRETE BLOCK | OBERFIELDS | COLOSSAL BLOK GRAPHITE, SMOOTH/SPLITFACE | | |
| | METAL WALL PANEL | VARCO PRUDEN BUILDINGS | COOL GRANITE GRAY | | |
| | METAL ROOF PANEL | VARCO PRUDEN BUILDINGS | GALVALUME | | |
| | METAL TRIM | VARCO PRUDEN BUILDINGS | COOL ZINC GRAY | | |
| | GUTTER/ DOWN SPOUT | VARCO PRUDEN BUILDINGS | COOL ZINC GRAY | | |
| | ALUMINUM STOREFRONT | | CLEAR ANODIZED ALUMINUM WITH 1" INSULATED TINTED GLAZING | | |
| | ACCENT PAINT | _ | | | |
| | FENCE | SIMTEK | ECOSTONE PLUS, GRAY 4'-0" x 8'-0" PANEL | | |

| OVERALL BUILDING ELEVATION AREA (SF) EXCEPTIONS (SF) | 5,250 |
|--|-----------------------------|
| CSX (WEST) | 1,230 |
| SCREENED FROM VIEW (SOUTH) | 825 |
| TOTAL AREA CALCULATED FOR ARCHITECTURAL FINISH (SF) AREA OF PRIMARY MATERIALS (SF) | 3,195 |
| CULTURED STONE | 1,045 |
| GLASS | 656 |
| | 1,701 > 50% OF 4,020 (53.2% |

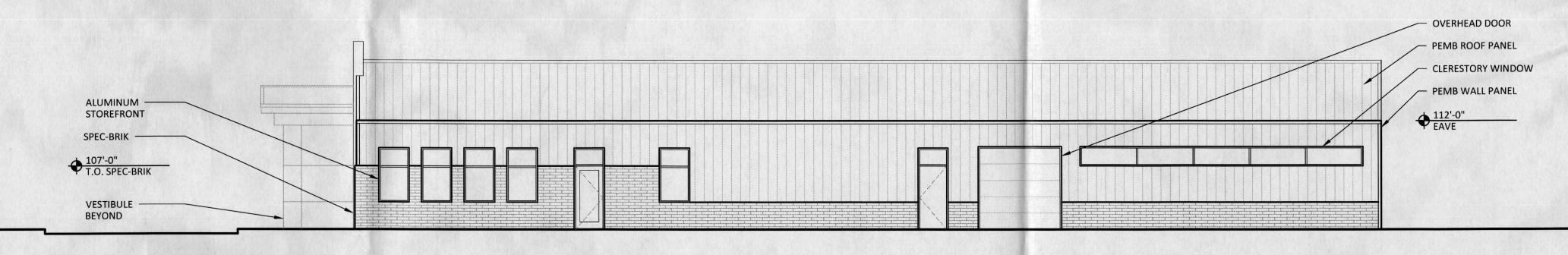
| EAST ELEVATION | |
|--|---|
| AREA OF PRIMARY MATERIALS (SF) CULTURED STONE GLAZING SYSTEM | 662 (49.7%) 352 (26.4%) 1,014 (76.1%) |
| AREA OF SECONDARY MATERIALS (SF) METAL WALL PANEL | <u>316 (23.9%)</u> |
| ELEVATION AREA (SF) | 1,330 |
| AREA CALCULATED FOR ARCHITECTURAL FINISH (SF) | 1,330 |

| NORTH ELEVATION | |
|--|---|
| AREA OF PRIMARY MATERIALS (SF) CULTURED STONE GLAZING SYSTEM | 355 (26.3%) 203 (15.1%) 558 (41.4%) |
| AREA OF SECONDARY MATERIALS (SF) METAL WALL PANEL | <u>787 (58.6%)</u> |
| ELEVATION AREA (SF) | 1,345 |
| AREA CALCULATED FOR ARCHITECTURAL FINISH (SF) | 1,345 |



EAST ELEVATION

1/8" = 1'-0"



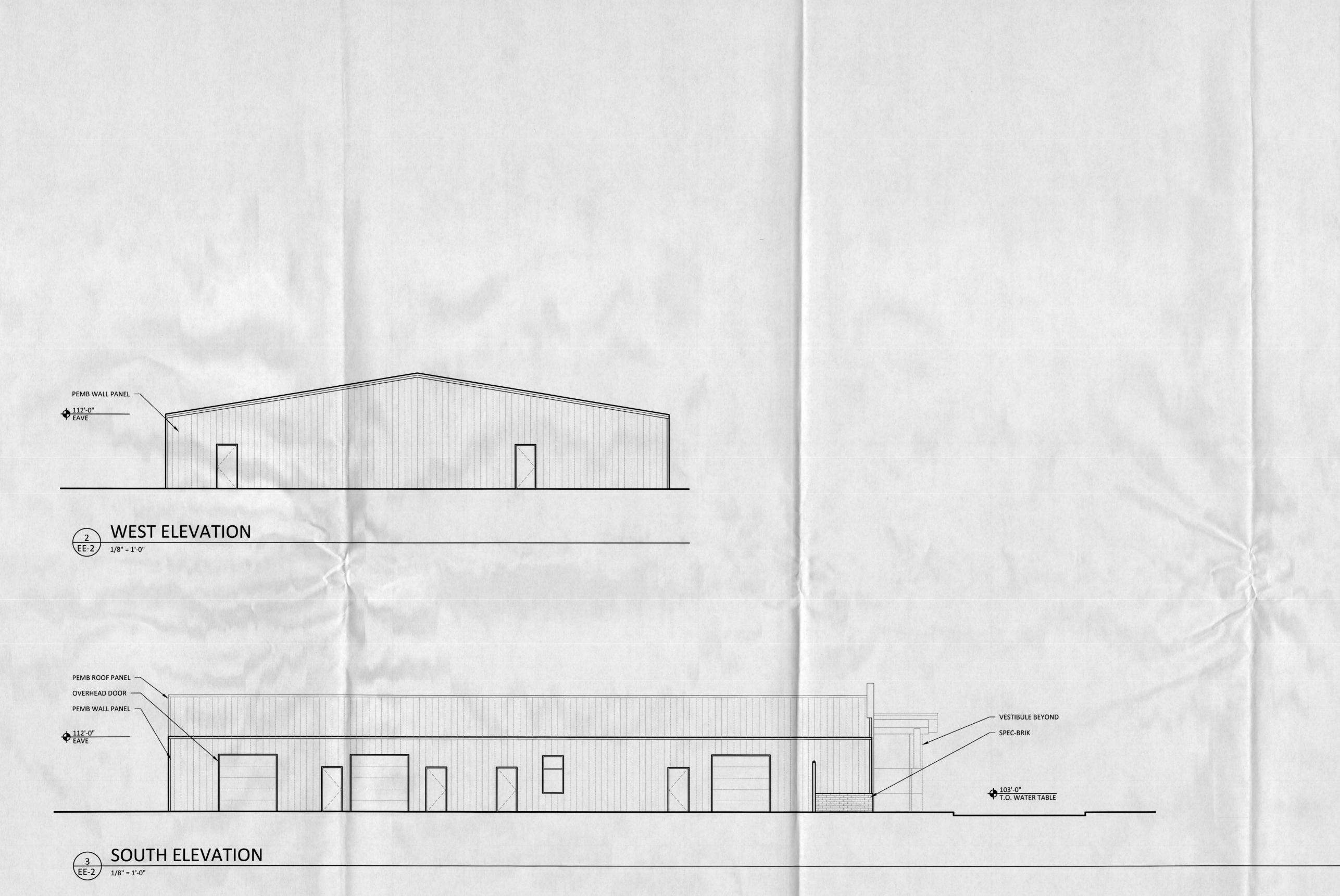
NORTH ELEVATION

1/8" = 1'-0"









WEST ELEVATION

AREA OF PRIMARY MATERIALS (SF) CULTURED STONE GLAZING SYSTEM

<u>0</u> (0%)

<u>1,230</u> (100%)

METAL WALL PANEL OVERALL ELEVATION AREA

AREA OF SECONDARY MATERIALS (SF)

1,230

EXCEPTIONS (SF)

**1,230 AREA CALCULATED FOR ARCHITECTURAL FINISH (SF) 0

** SINCE THIS ELEVATION FACES THE RAILROAD IT IS EXEMPT AND THE AREA OF THE ELEVATION IS NOT USED IN THE OVERALL BUILDING MATERIAL CALCULATION.

SOUTH ELEVATION

AREA OF PRIMARY MATERIALS (SF) *CULTURED STONE *GLAZING SYSTEM

28 (2.0%) 101 (7.5%) 129 (9.5%)

AREA OF SECONDARY MATERIALS (SF)

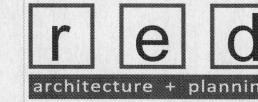
METAL WALL PANEL ELEVATION AREA (SF)

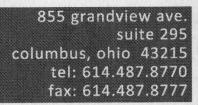
<u>1,216</u> (90.5%) 1,345

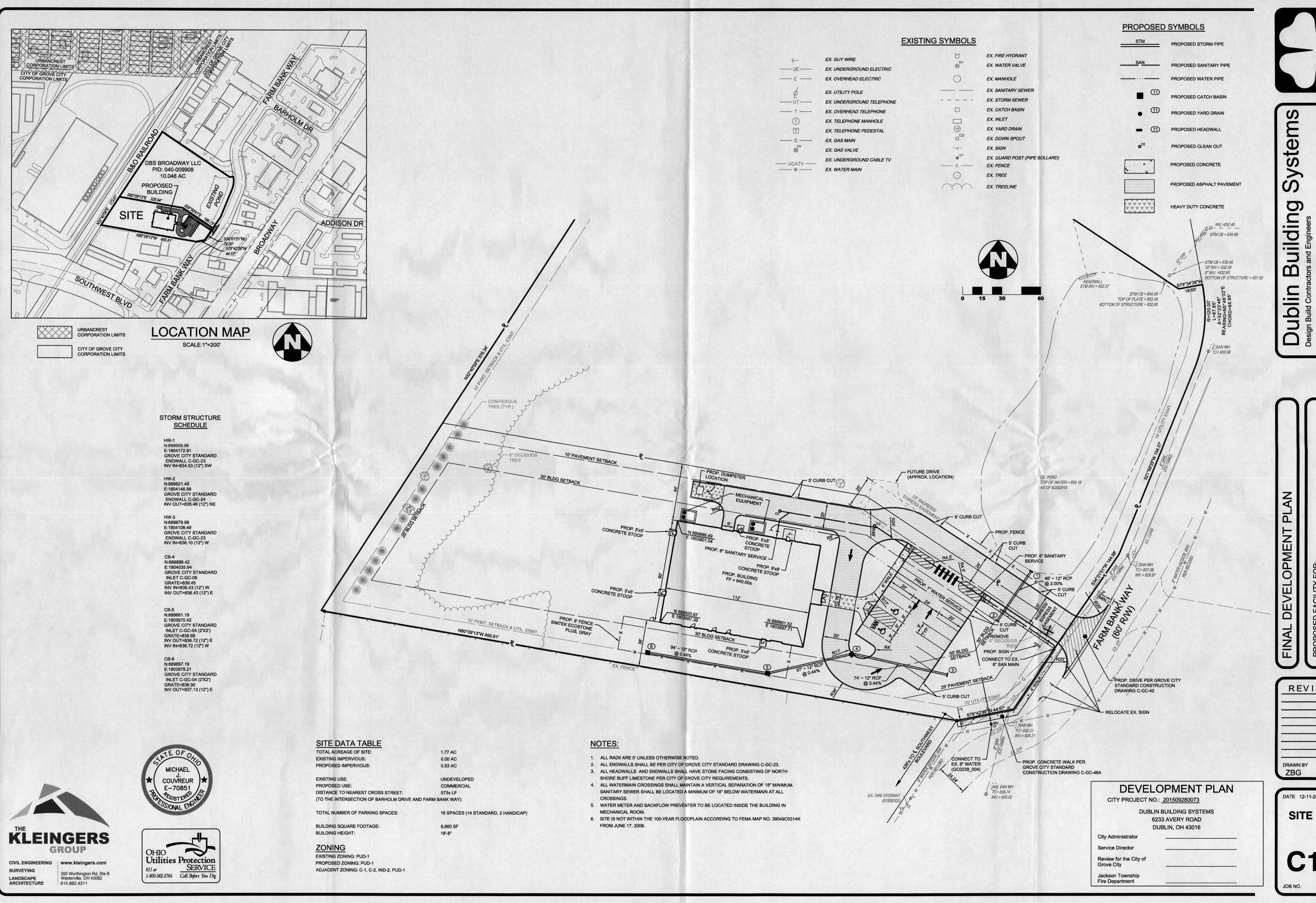
EXCEPTIONS (SF) SCREENED FROM VIEW

825 AREA CALCULATED FOR ARCHITECTURAL FINISH (SF) 520

*THIS AREA IS USED IN THE OVERALL BUILDING MATERIAL CALCULATION.



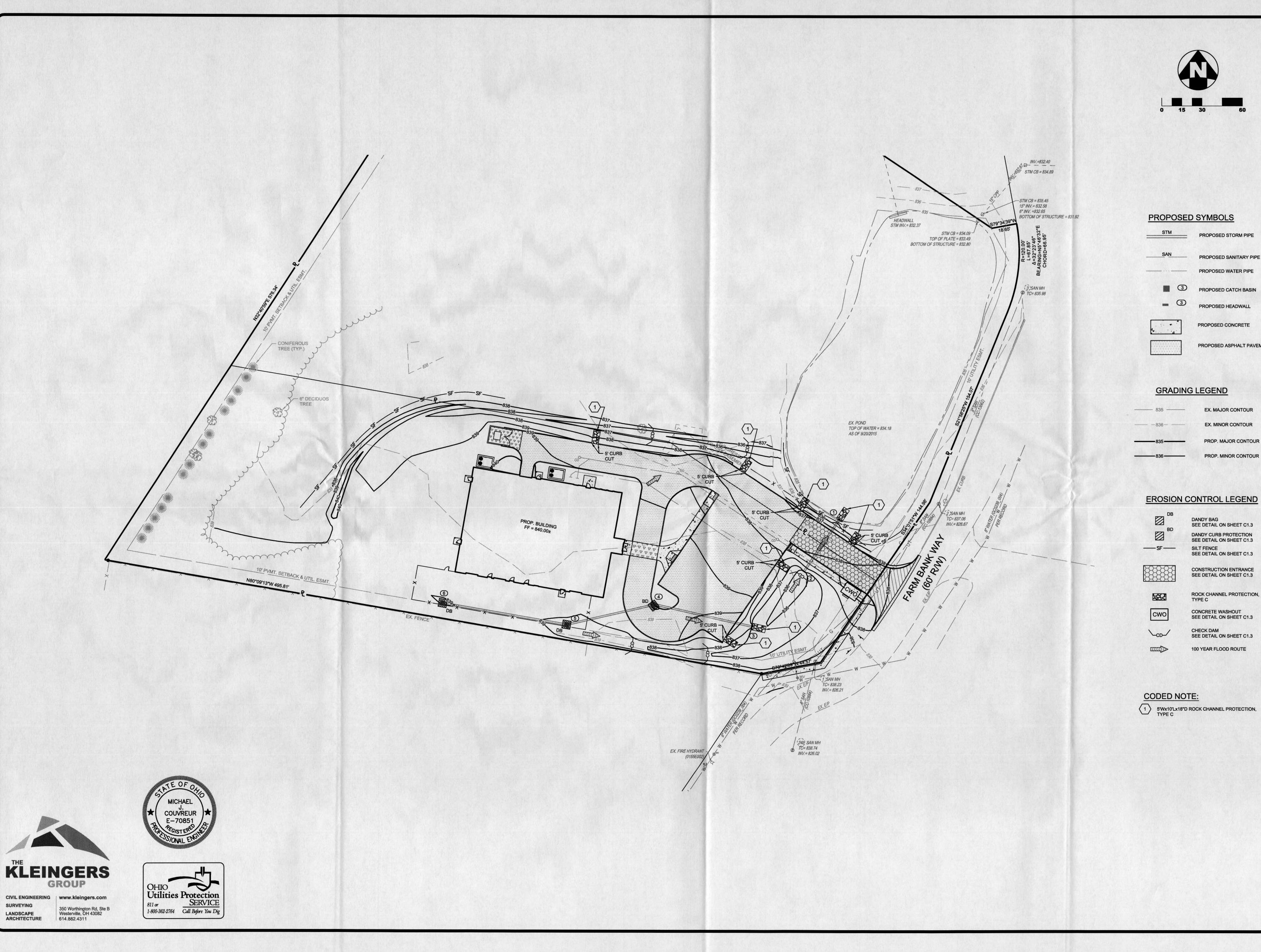




REVISIONS

CHECKED BY MJC

DATE 12-11-2015 SITE PLAN





uilding

PROPOSED SANITARY PIPE

PROPOSED WATER PIPE

PROPOSED CATCH BASIN

PROPOSED HEADWALL

PROPOSED CONCRETE

EX. MAJOR CONTOUR

EX. MINOR CONTOUR

PROP. MAJOR CONTOUR

PROP. MINOR CONTOUR

DANDY BAG SEE DETAIL ON SHEET C1.3

DANDY CURB PROTECTION SEE DETAIL ON SHEET C1.3

SILT FENCE SEE DETAIL ON SHEET C1.3

CONSTRUCTION ENTRANCE SEE DETAIL ON SHEET C1.3

ROCK CHANNEL PROTECTION, TYPE C

CONCRETE WASHOUT SEE DETAIL ON SHEET C1.3

PROPOSED ASPHALT PAVEMENT

CHECK DAM SEE DETAIL ON SHEET C1.3 100 YEAR FLOOD ROUTE

CODED NOTE:

REVISIONS

DRAWN BY CHECKED BY ZBG

DATE 12-11-2015 **GRADING AND EROSION**

CONTROL PLAN

PERMITTEE:

OWNER:

DUBLIN BUILDING SYSTEMS DUBLIN BUILDING SYSTEMS 6233 AVERY ROAD 6233 AVERY ROAD DUBLIN, OHIO 43016 DUBLIN, OHIO 43016 (614) 889-1445 (614) 889-1445

NPDES PERMIT:

DATE OF ISSUE:

CENTER OF PROJECT:

LATITUDE: N 39°53'34.05" LONGITUDE: W 83°05'10.37"

PROJECT DESCRIPTION

NEW DOG KENNEL IN GROVE CITY, OHIO WITH PAVED PARKING LOT AND UTILITIES.

PROJECT DATA

TOTAL SITE AREA: TOTAL DISTURBED AREA: 1.24 ACRES PROPOSED IMPERVIOUS AREA: 0.53 ACRES PERCENTAGE OF CREATED IMPERVIOUS AREA:

RUNOFF COEFFICIENT FOR PRE-CONSTRUCTION: C=0.40 RUNOFF COEFFICIENT FOR POST-CONSTRUCTION: C=0.58

PRIOR LAND USE: RECEIVING WATER:

UNNAMED TRIBUTARY TO SCIOTO RIVER

ESTIMATED CONSTRUCTIONS DATES:

SOIL TYPES, DESCRIPTIONS: CrA - CROSBY SILT LOAM, SOUTHERN OHIO TILL PLAIN, 0 TO 2 PERCENT SLOPES

> CsA - CROSBY-URBAN LAND COMPLEX, 0 TO 2 PERCENT SLOPES

PROJECT SCHEDULE AND SEQUENCE

1. INSTALL PERIMETER EROSION CONTROLS ITEMS INCLUDING INLET PROTECTION, TEMPORARY EROSION CONTROL MATTING AND STABILIZED CONSTRUCTION ENTRANCE WITH PROPOSED CONCRETE CULVERT PIPE.

JANUARY 2016 - MAY 2016

- STRIP TOPSOIL AND UNSUITABLE MATERIAL ACROSS SITE. STOCKPILE TOPSOIL ONSITE AND MAINTAIN WITH TEMPORARY SEEDING.
- BEGIN ROUGH GRADING AND BUILDING PAD CONSTRUCTION. CONSTRUCT SANITARY SEWER, LIMIT DISTURBANCE TO AREA REQUIRED FOR CONSTRUCTION.
- 5. CONSTRUCT WATER SERVICE.
- CONSTRUCT STORM SEWER. INSTALL INLET PROTECTION AS SEWERS ARE CONSTRUCTED. FINALIZE GRADING SITE.
- FINISH REMAINING SITE WORK. STABILIZE SITE WITH ASPHALT PAVING AND CONCRETE SIDEWALK. 9. ONCE SITE IS STABILIZED, REMOVE REMAINING EROSION AND SEDIMENT CONTROLS.

GENERAL NOTES

THE CONTRACTOR IS HEREBY ADVISED THAT STRICTER POLLUTION CONTROL STANDARDS AND ENFORCEMENT HAVE BEEN IMPOSED BY THE OHIO EPA SINCE MARCH 10, 2003 AND WITH A REVISION IN APRIL 2008. ALSO, MANY PRIVATE CITIZEN ENVIRONMENTAL GROUPS, WHO HAVE BEEN KNOWN TO FILE CIVIL LEGAL ACTIONS, ARE PRESENT IN THE AREA AND OBSERVE ALL CONSTRUCTION OPERATIONS.

THE CONTRACTOR SHALL INFORM ALL SUBCONTRACTORS OF THE REQUIREMENTS AND RESPONSIBILITIES OF THE SWPPP AND SHALL DOCUMENT ALL SUCH NOTIFICATIONS AND/OR DISCUSSIONS. ALL SUBCONTRACTORS SHALL SIGN THE NOI.

THE CONTRACTOR WILL BE REQUIRED TO PARTICIPATE IN SEDIMENT AND EROSION CONTROL INSPECTIONS ON A WEEKLY BASIS AND SIGN AN APPROVED INSPECTION SHEET THAT SHALL BE KEPT ON FILE AT THE JOB SITE.

UNLESS OTHERWISE NOTED, STANDARDS AND SPECIFICATIONS ESTABLISHED IN THE LATEST EDITION OF THE ODNR "RAINWATER AND LAND DEVELOPMENT" HANDBOOK SHALL GOVERN THE EROSION AND SEDIMENT CONTROL INSTALLATIONS SPECIFIED ON THIS PLAN.

THIS PROJECT WILL INVOLVE SEVERAL CONSTRUCTION PHASES AND SEQUENCING THROUGHOUT ITS LIFETIME. IT IS VERY IMPORTANT THAT ALL TEMPORARY SEDIMENT AND EROSION CONTROL (S&EC) FIELD METHODS ALONG WITH THIS PLAN, ARE UPDATED TO REFLECT THE ACTUAL FIELD CONDITIONS, CURRENT WEATHER CONDITIONS AND SITE GRADE CHANGES. THE CONTRACTOR, OWNER, ENGINEER OR THE OHIO EPA CAN AND WILL MODIFY THIS PLAN AS NECESSARY.

THE CONTRACTOR WILL VOLUNTARILY SELF REPORT ANY POTENTIAL VIOLATIONS OF THE OEPA NPDES PERMIT TO THE OWNER, ENGINEER AND THE OEPA.

THE CONTRACTOR SHALL REMOVE EXISTING GROUND COVER ONLY AS NECESSARY FOR THE PROJECT PHASE CURRENTLY UNDER CONSTRICTION.

CONSTRUCTION AND DEMOLITION DEBRIS SHALL BE PROPERLY DISPOSED OF ACCORDING TO OHIO EPA REQUIREMENTS.

THE CONTRACTOR WILL BE REQUIRED TO BUILD SEDIMENT BASINS OR SEDIMENT TRAPS OR USE EQUAL METHODS TO DETAIN AND CLEAN WATER TO ACCEPTABLE EPA STANDARDS BEFORE RELEASING THE WATER BACK INTO THE STREAM.

ALL DEWATERING ACTIVITIES SHALL BE CARRIED OUT IN ACCORDANCE WITH THE PRACTICES OUTLINED IN PART III.G.2.G.IV OF THE OEPA GENERAL PERMIT.

THERE SHALL BE NO TURBID DISCHARGES TO SURFACE WATERS, RESULTING FROM DEWATERING ACTIVITIES. SEDIMENT-LADEN WATER MUST PASS THROUGH A SETTLING POND, FILTER BAG, OR OTHER COMPARABLE PRACTICE, PRIOR TO DISCHARGE.

NO SOLID OR LIQUID WASTE SHALL BE DISCHARGED INTO STORM WATER RUNOFF.

ALL PROCESS WASTEWATER (EQUIPMENT WASHING, LEACHATE FROM ON-SITE WASTE DISPOSAL, ETC.) SHALL BE COLLECTED AND DISPOSED OF AT A PUBLICLY OWNED TREATMENT

ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH ALL LOCAL EROSION/SEDIMENT CONTROL, WASTE DISPOSAL, SANITARY AND HEALTH REGULATIONS.

OTHER EROSION CONTROL ITEMS MAY BE NECESSARY DUE TO ENVIRONMENTAL CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION AND IMPLEMENTATION OF ADDITIONAL EROSION CONTROL ITEMS, AT THE ENGINEER'S DISCRETION.

NO SOIL, ROCK, DEBRIS OR OTHER MATERIAL SHALL BE DUMPED OR PLACED IN ANY AREAS NOT ADEQUATELY PROTECTED BY EROSION CONTROL INSTALLATIONS.

IT IS PREFERRED TO USE PERMANENT EROSION CONTROL ITEMS AS SHOWN IN THE PLANS TO CONTROL CONSTRUCTION POLLUTION WHEN POSSIBLE. OTHERWISE, THE TEMPORARY POLLUTION PREVENTION ITEMS ARE TO BE USED.

MOST TEMPORARY S&EC METHODS, INCLUDING BUT NOT LIMITED TO, SILT FENCE AND DITCH CHECKS MAY ALL HAVE TO BE PERIODICALLY REMOVED AND REPLACED, OR MOVED FROM THE EXISTING ROAD DITCH OR STRIPPED AREAS AS WORK PROGRESSES. ANY CHANGES SHALL BE NOTED IN THE PLAN BY RED LINE AND DATED ON A CORRECTIVE ACTION LOG.

ALL TEMPORARY SEDIMENT CONTROLS AND STORM WATER QUALITY METHODS WILL BE BUILT/INSTALLED AS THE PROJECT PROGRESSES TO ELIMINATE UNNECESSARY DISTURBANCE AND REDUNDANCY. ALL TEMPORARY CONTROLS SHALL BE IN PLACE AND FUNCTIONING PROPERLY WHEN THREATENING WEATHER IS IMMINENT.

"TEMPORARY STABILIZATION" MEANS THE ESTABLISHMENT OF TEMPORARY VEGETATION, MULCHING, GEOTEXTILES, SOD, PRESERVATION OF EXISTING VEGETATION AND OTHER TECHNIQUES CAPABLE OF QUICKLY ESTABLISHING COVER OVER DISTURBED AREAS TO PROVIDE EROSION CONTROL BETWEEN CONSTRUCTION OPERATIONS.

"PERMANENT STABILIZATION" MEANS THE ESTABLISHMENT OF PERMANENT VEGETATION, DECORATIVE LANDSCAPE MULCHING, MATTING, SOD, RIP RAP AND LANDSCAPING TECHNIQUES TO PROVIDE PERMANENT EROSION CONTROL ON AREAS WHERE CONSTRUCTION OPERATIONS ARE COMPLETE OR WHERE NO FURTHER DISTURBANCE IS EXPECTED FOR AT LEAST A

OFF-SITE TRACKING OF SEDIMENTS SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION ENTRANCE WILL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. ALL PAVED STREETS ADJACENT TO THE SITE WILL BE SWEPT DAILY TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE WILL BE COVERED WITH A TARP.



CIVIL ENGINEERING www.kleingers.com 350 Worthington Rd. Ste B Westerville, OH 43082 ANDSCAPE 614.882.4311 ARCHITECTURE



COUVREUR

E-7085

STABILIZATION PRACTICES

PERMANENT SEEDING AND MULCHING STABILIZATION SHALL BE PROVIDED PER OEPA GUIDELINES AS SET FORTH IN PART II.B OF OHIO EPA PERMIT NO.: OHC000004. (SEE TABLE 1)

TABLE 1: PERMANENT STABILIZATION

| AREA REQUIRING PERMANENT STABILIZATION | TIME FRAME TO APPLY EROSION CONTROLS |
|---|--|
| ANY AREAS THAT WILL LIE DORMANT FOR ONE YEAR OR MORE | WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE |
| ANY AREAS WITHIN 50 FEET OF A SURFACE WATER OF THE STATE AND AT FINAL GRADE | WITHIN TWO DAYS OF REACHING FINAL GRADE |
| ANY OTHER AREAS AT FINAL GRADE | WITHIN SEVEN DAYS OF REACHING FINAL GRADE WITHIN THAT AREA |

TEMPORARY SEEDING AND MULCHING STABILIZATIO SHALL BE PROVIDED PER OEPA GUILDLINES AS SET FORTH IN PAR II.B OF OHIO EPA NO.: OCH000004 (SEE TABLE 2)

TABLE 2: TEMPORARY STABILIZATION

| AREA REQUIRING TEMPORARY STABILIZATION | TIME FRAME TO APPLY EROSION CONTROLS |
|--|--|
| ANY DISTURBED AREAS WITHIN 50 FEET OF A SURFACE WATER OF THE STATE AND NOT AT FINAL GRADE | WITHIN TWO DAYS OF THE MOST RECENT DISTURBANCE IF THE AREA WILL REMAIN IDLE FOR MORE THAN 14 DAYS |
| FOR ALL CONSTRUCTION ACTIVITIES, ANY DISTURBED AREAS THAT WILL BE DORMANT FOR MORE THAN 14 DAYS BUT LESS THAN ONE YEAR, AND NOT WITHIN 50 FEET OF A SURFACE WATER OF THE STATE | WITHIN SEVEN DAYS OF THE MOST RECENT DISTURBANCE WITHIN THE AREA FOR RESIDENTIAL SUBDIVISIONS, DISTURBED AREAS MUST BE STABILIZED AT LEAST SEVEN DAYS PRIOR TO TRANSFER OF PERMIT COVERAGE FOR THE INDIVIDUAL LOT(S). |
| DISTURBED AREAS THAT WILL BE IDLE OVER WINTER | PRIOR TO THE ONSET OF WINTER WEATHER |

ALL TEMPORARY EROSION AND SEDIMENT CONTROL INSTALLATIONS SHALL BE REMOVED WHEN 70% VEGETATION HAS BEEN REACHED.

SEEDING & MULCHING

MULCH AND/OR OTHER APPROPRIATE VEGETATIVE PRACTICES SHALL BE APPLIED TO DISTURBED AREAS WITHIN 7 DAYS OF GRADING IF THE AREA IS TO REMAIN DORMANT (UNDISTURBED) FOR MORE THAN 14 DAYS OR ON AREAS AND PORTIONS OF THE SITE WHICH CAN BE BROUGHT TO FINAL GRADE.

MULCH SHALL CONSIST OF UNROTTED SMALL GRAIN STRAW APPLIED AT THE RATE OF 3 TONS/AC. OR 138 LB./1000 SQ. FT. (TWO TO THREE BALES). THE STRAW MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1000-SQ.-FT. SECTIONS AND PLACE THREE 45-LB. BALES OF STRAW IN EACH SECTION.

MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR RUNOFF. THE FOLLOWING ARE ACCEPTABLE METHODS FOR ANCHORING MULCH:

- 1) MECHANICAL-USE A DISK, CRIMPER, OR SIMILAR TYPE TOOL SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL. STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT BE LEFT GENERALLY LONGER THAN 6 IN.
- 2) MULCH NETTINGS-USE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS, FOLLOWING ALL PLACEMENT AND ANCHORING SUGGESTIONS. USE IN AREAS OF WATER CONCENTRATION AND STEEP SLOPES TO HOLD MULCH IN PLACE.
- 3) ASPHALT EMULSION-FOR STRAW MULCH, APPLY AT THE RATE OF 160 GAL./AC. (0.1 GAL./SY) INTO THE MULCH AS IT IS BEING APPLIED OR AS RECOMMENDED BY THE MANUFACTURE.
- 4) SYNTHETIC BINDERS-FOR STRAW MULCH, SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI-TAC), DCA-70, PETROSET, TERRA TACK OR EQUAL MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER.

| TEMPORARY SEEDING & MULCHING FOR EROSION CONTROL | | | | | |
|--|-------------------------------------|---------------------------------------|--|--|--|
| SEED TYPE | PER 1000 SQ FT | PER ACRE | | | |
| PERENNIAL RYEGRASS TALL FESCUE ANNUAL RYEGRASS | 1 POUND 1 POUND 1 POUND | 40 POUNDS 40 POUNDS 40 POUNDS | | | |
| SMALL GRAIN STRAW | 90 POUNDS | 2 TONS | | | |
| FERTILIZER | 6 POUNDS OF 10-10-10 OR 12-12-12 | 250 POUNDS OF 10-10-10 OR 12-12-12 | | | |

NOTE: OTHER APPROVED SPECIES MAY BE SUBSTITUTED

WINTER SEEDING & MULCHING

WINTER SEED AND MULCH IS REQUIRED FOR EARTH DISTURBANCE ACTIVITY OPERATIONS OCCURRING BETWEEN OCTOBER 15 AND MARCH 15 AND CAN ONLY BE INSTALLED DURING THAT TIME. ALL STRAW MULCH INCLUDED IN THIS WORK MUST BE EITHER CRIMPED IN PLACE OR INSTALLED WITH A BIODEGRADABLE BONDED FIBER MATRIX. CRIMPED MULCH IS REQUIRED TO BE ANCHORED INTO THE SOIL SURFACE WITH A MECHANICAL CRIMPING IMPLEMENT OR OTHER SUITABLE IMPLEMENT APPROVED BY THE ENGINEER. THE MULCH INCLUDED IN THIS WORK MUST BE CAPABLE OF PROVIDING SUFFICIENT DURABLE PROTECTIVE COVER THAT PROVIDES OF A NPDES PERMIT COMPLIANT EROSION CONTROL FOR A MINIMUM OF 6 MONTHS. THE USE OF OTHER SEED AND/OR MULCH MATERIALS IN THIS TIME PERIOD REQUIRES SPECIFIC APPROVAL BY THE ENGINEER. THE USE OF WINTER SEEDING AND MULCHING IS NOT AN ACCEPTABLE PRACTICE FOR PROTECTING THE SUBGRADE SURFACE.

STOCKPILE

SILT FENCING SHALL BE INSTALLED AROUND TEMPORARY SPOIL STOCKPILES. THESE STOCKPILES SHALL BE STRAW MULCHED AND/OR TEMPORARILY SEEDED WITHIN 7 WORKING DAYS IF LEFT DORMANT FOR 14 DAYS OR LONGER.

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, CONSTRUCTION ENTRANCE(S) AND SILT FENCE WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. SEDIMENT CONTROL DEVICES SHALL BE IMPLEMENTED FOR ALL AREAS REMAINING DISTURBED LONGER THAN 14 DAYS AND/OR WITHIN 7 DAYS OF ANY GRUBBING ACTIVITIES. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN 14 DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN 2 DAYS OF THE LAST DISTURBANCE IF THE AREA IS WITHIN 50 FEET OF A STREAM, AND WITHIN 7 DAYS OF THE LAST DISTURBANCE IF THE AREA IS MORE THAN 50 FEET AWAY FROM A STREAM. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA. THAT AREA WILL BE STABILIZED WITH PERMANENT SEED AND MULCH. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE

| STABILIZATION TYPE | J | F | М | Α | М | J | J | A | s | 0 | N | D |
|--------------------|---|---|-----|-----|-----|-----|-----|-----|-----|---|-----|---|
| PERMANENT SEEDING | | | • | • | • | * | * | * | • | • | | |
| DORMANT SEEDING | • | • | • | | | | | | | • | • | • |
| TEMPORARY SEEDING | | | • | • | • | * | * | * | • | • | | |
| SODDING | | | * * | * * | * * | * * | * * | * * | * * | | 120 | |
| MULCHING | • | • | • | • | • | • | • | • | • | • | • | • |

- IRRIGATION NEEDED IRRIGATION NEEDED FOR 2-3 WEEKS AFTER SOD IS APPLIED

INSPECTIONS

ALL BMPS ON THIS SITE SHALL BE INSPECTED BY THE CONTRACTOR OR DESIGNATED REPRESENTATIVE AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS AFTER A RAIN EVENT OF 0.5 INCHES PER 24 HOUR PERIOD. A RECORD OF THESE INSPECTIONS SHALL BE MAINTAINED IN THE CONSTRUCTION OFFICE WITH THE SWPPP FOR PUBLIC VIEWING. ANY VIOLATIONS WILL BE REPORTED THROUGH THE PROJECT PERSONNEL. A RAIN GAUGE WILL BE LOCATED WITHIN THE PROJECT LIMITS.

FOLLOWING EACH INSPECTION, A CHECKLIST MUST BE COMPLETED AND SIGNED BY THE QUALIFIED INSPECTION PERSONNEL REPRESENTATIVE. AT A MINIMUM, THE

- THE INSPECTION DATE;
 - II. NAMES, TITLES, AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION;
 - III. WEATHER INFORMATION FOR THE PERIOD SINCE THE LAST INSPECTION (OR SINCE COMMENCEMENT OF CONSTRUCTION ACTIVITY IF THE FIRST INSPECTION) INCLUDING A BEST ESTIMATE OF THE BEGINNING OF EACH STORM EVENT, DURATION OF EACH STORM EVENT, APPROXIMATE AMOUNT OF
- RAINFALL FOR EACH STORM EVENT (IN INCHES), AND WHETHER ANY DISCHARGES OCCURRED IV. WEATHER INFORMATION AND A DESCRIPTION OF ANY DISCHARGES OCCURRING AT THE TIME OF THE INSPECTION;
- V. LOCATION(S) OF DISCHARGES OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE;
- VI. LOCATION(S) OF BMPS THAT NEED TO BE MAINTAINED;
- VII. LOCATION(S) OF BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION;
- VIII. LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED THAT DID NOT EXIST AT THE TIME OF INSPECTION; AND IX. CORRECTIVE ACTION REQUIRED INCLUDING ANY CHANGES TO THE SWP3 NECESSARY AND IMPLEMENTATION DATES.
- THE PERMITTEE SHALL MAINTAIN A RECORD OF ALL INSPECTIONS FOR A PERIOD OF 3 YEARS FOLLOWING THE SUBMITTAL OF THE NOTICE OF TERMINATION.

THE CONTRACTOR SHALL MAINTAIN, REPAIR, OR REPLACE ALL EROSION CONTROL INSTALLATIONS AS NEEDED TO ENSURE THE CONTINUED PERFORMANCE OF THEIR INTENDED FUNCTION. ALL REPAIRS TO BMPS SHALL BE MADE WITHIN 3 DAYS (OR SOONER IF POSSIBLE) OF NOTIFICATION OF DEFICIENCIES. IF THE CORRECTIONS ARE NOT MADE WITHIN THE 3 DAY PERIOD. LIQUIDATED DAMAGES MAY BE ASSESSED AS PER THE ODOT CMS SECTION 108.27, ONGOING INSPECTION OF INSTALLATIONS WILL BE PERFORMED BY THE CONTRACTOR OR DESIGNATED REPRESENTATIVE.

ANY TRAPPED SEDIMENT OR DEBRIS REMOVED DURING CLEANING OF OR REMOVAL OF BMP INSTALLATIONS SHALL BE PLACED IN AREAS NOT SUBJECT TO EROSION AND PERMANENTLY STABILIZED.

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES:

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF.

- THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT.
- 1. AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
- 2. ALL MATERIALS STORED ONSITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
- 3. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL. 4. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
- 5. WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
- 6. MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED. 7. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE.

HAZARDOUS PRODUCTS:

THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

- 1. PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.
- 2. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED; THEY CONTAIN IMPORTANT PRODUCT INFORMATION.
- 3. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURERS' OR LOCAL AND STATE RECOMMENDED METHODS FOR PROPER DISPOSAL WILL BE FOLLOWED.

SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

- 1. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY. MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP
- 2. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND,
- SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE. 3. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT
- 4. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE. SPILLS OF 25 OR MORE GALLONS OF PETROLEUM WASTE MUST BE REPORTED TO OHIO EPA (1-800-282-9378), THE LOCAL FIRE DEPARTMENT, AND THE LOCAL EMERGENCY PLANNING COMMITTEE WITHIN 30 MINUTES OF THE SPILL.

5. SOILS CONTAMINATED BY PETROLEUM OR OTHER CHEMICAL SPILLS MUST BE TREATED/DISPOSED AT AN OHIO EPA APPROVED SOLID

- WASTE MANAGEMENT FACILITY OR HAZARDOUS WASTE TREATMENT, STORAGE OR DISPOSAL FACILITY (TSDF). 6. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES
- 7. THE SITE SUPERINTENDENT RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE WILL DESIGNATE SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IN THE OFFICE TRAILER ONSITE.

PRODUCT SPECIFIC PRACTICES

THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ONSITE:

INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

PETROLEUM PRODUCTS - ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FUEL STORAGE TANKS SHALL BE LOCATED AWAY FROM SURFACE WATERS AND STORM SEWER SYSTEM INLETS. FUEL TANKS SHALL BE STORED IN A DIKED AREA CAPABLE OF HOLDING 150% OF THE TANK CAPACITY.

OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

PAINTS - ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

CONCRETE TRUCKS - CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE.

FERTILIZERS - FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A COVERED SHED. THE CONTENTS

DUST CONTROL

DUST CONTROL INVOLVES PREVENTING OR REDUCING DUST FROM EXPOSED SOILS OR OTHER SOURCES DURING LAND DISTURBING. DEMOLITION AND CONSTRUCTION ACTIVITIES TO REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES WHICH MAY PRESENT HEALTH HAZARDS, TRAFFIC SAFETY PROBLEMS OR HARM ANIMAL OR PLANT LIFE.

THE FOLLOWING SPECIFICATIONS FOR DUST CONTROL SHALL BE FOLLOWED ONSITE:

- <u>VEGETATIVE COVER AND/MULCH</u> APPLY TEMPORARY OR PERMANENT SEEDING AND MULCH TO AREAS THAT WILL REMAIN IDLE FOR OVER 14 DAYS. SAVING EXISTING TREES AND LARGE SHRUBS WILL ALSO REDUCE SOIL AND AIR MOVEMENT ACROSS DISTURBED AREAS. SEE TEMPORARY SEEDING; PERMANENT SEEDING; MULCHING PRACTICES; AND TREE AND NATURAL AREA PROTECTION PRACTICES.
- 2. WATERING SPRAY SITE WITH WATER UNTIL THE SURFACE IS WET BEFORE AND DURING GRADING AND REPEAT AS NEEDED, ESPECIALLY ON HAUL ROADS AND OTHER HEAVY TRAFFIC ROUTES. WATERING SHALL BE DONE AT A RATE THAT PREVENTS DUST BUT DOES NOT CAUSE SOIL EROSION. WETTING AGENTS SHALL BE UTILIZED ACCORDING TO MANUFACTURERS INSTRUCTIONS.

3. SPRAY-ON ADHESIVES - APPLY ADHESIVE ACCORDING TO THE FOLLOWING TABLE OR MANUFACTURERS' INSTRUCTIONS.



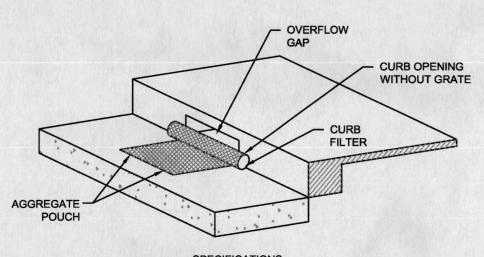
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REVISIONS

CHECKED BY

DATE 12-11-2015 **EROSION**

DRAWN BY



CONCRETE WASHOUT DETAIL

| | SPECIFIC | CATIONS | |
|-------------------------|-------------|-----------------------|-------------------------|
| MECHANICAL PROPERTIES | TEST METHOD | UNITS | MARV |
| GRAB TENSILE STRENGTH | ASTM D 4632 | KN (LBS) | 1.62 (365) X 0.89 (200) |
| GRAB TENSILE ELONGATION | ASTM D 4632 | % | 24 X 10 |
| PUNCTURE STRENGTH | ASTM D 4833 | KN (LBS) | 0.40 (90) |
| MULLEN BURST STRENGTH | ASTM D 3786 | KPA (PSI) | 3097 (450) |
| TRAPEZOID TEAR STRENGTH | ASTM D 4533 | KN (LBS) | 0.51 (115) X 0.33 (75) |
| UV RESISTENCE | ASTM D 4355 | % | 90 |
| APPARENT OPENING SIZE | ASTM D 4751 | MM (US STD SIEVE) | 0.425 (40) |
| FLOW RATE | ASTM D 4491 | 1/MIN/M²(GAL/MIN/FT²) | 5907 (145) |
| PERMITTIVITY | ASTM D 4491 | SEC ⁻¹ | 21 |

INSTALLATION: PLACE DANDY CURB INLET PROTECTION UNIT ON GROUND WITH AGGREGATE POUCH ON STREET SIDE NEAR INLET IT WILL BE INSTALLED ON. TO INSTALL ABSORBENT, PLACE ABSORBENT SOCK IN POUCH. FILL POUCH WITH AGGREGATE SUCH AS #5-7, 8'S OR SIMILAR TO A LEVEL (AT LEAST 1/2 FULL) THAT WILL KEEP UNIT IN PLACE DURING A RAIN EVENT AND CREATE À SEAL BETWEEN THE DANDY CURB AND THE SURFACE OF THE STREET. RESEAL VELCRO ACCESS, CENTER THE UNIT AGAINST THE CURB OR MEDIAN INLET OPENING SO THAT THE CURB SIDE OF THE UNIT CREATES A SEAL WITH THE CURB OR MEDIAN BARRIER

MAINTENANCE: WITH A STIFF BRISTLE BROOM OR SQUARE POINT SHOVEL REMOVE SILT & OTHER DEBRIS OFF SURFACE AFTER EACH EVENT. REMOVE FINE MATERIAL FROM INSIDE ENVELOPE AS NEEDED. REMOVE AND REPLACE ABSORBENT WHEN NEAR SATURATION. DANDY CURB DETAIL



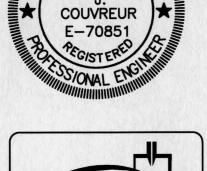


SURVEYING

LANDSCAPE ARCHITECTURE

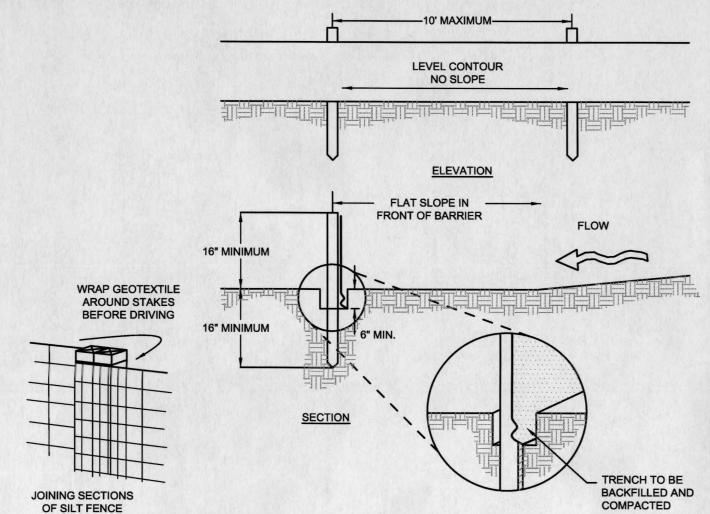
350 Worthington Rd, Ste B Westerville, OH 43082 614.882.4311





SERVICE

MICHAEL



NOTES: 1. SILT FENCE SHALL BE CONSTRUCTED BEFORE DISTURBANCE BEGINS.

2. ALL SILT FENCE SHALL BE PLACED AS CLOSE AS POSSIBLE SO THAT WATER WILL NOT CON POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS THAT MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.

3. ENDS OF THE SILT FENCES SHALL BE BROUGHT UPSLOPE SLIGHTLY SO THAT WATER PONDED BY THE SILT FENCE WILL BE PREVENTED FROM FLOWING AROUND THE ENDS.

4. SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.

5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FEET (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE REESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE CRITERIA FOR SILT FENCE MATERIALS

6. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 INCHES ABOVE THE ORIGINAL GROUND SURFACE.

TRENCH CUT A MINIMUM OF 6 INCHES DEEP. THE TRENCH SHALL BE MADE WITH A TRENCHER, CABLE LAYING MACHINE, SLICING MACHINE, OR OTHER SUITABLE DEVICE THAT WILL ENSURE AN ADEQUATELY UNIFORM TRENCH DEPTH 8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE. A MINIMUM OF 8 INCHES

. THE SILT FENCE SHALL BE PLACED IN AN EXCAVATED OR SLICED

OF GEOTEXTILE MUST BE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6-INCH DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED ON BOTH SIDES OF THE FABRIC.

9. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST WITH A MINIMUM 6-IN. OVERLAP PRIOR TO DRIVING INTO THE GROUND.

USED FOR EASY MOVEMENT

STANDARD FABRIC -

IS AN ORANGE

MECHANICAL PROPERTIES | TEST METHOD

GRAB TENSILE ELONGATION | ASTM D 4632

PUNCTURE STRENGTH ASTM D 4833

UV RESISTENCE ASTM D 4355

PERMITTIVITY ASTM D 4491

MULLEN BURST STRENGTH | ASTM D 3786 | KPA (PSI)

TRAPEZOID TEAR STRENGTH | ASTM D 4533 | KN (LBS)

APPARENT OPENING SIZE ASTM D 4751 MM (US STD SIEVE)
FLOW RATE ASTM D 4491 1/MIN/M²(GAL/MIN/FT²)

ENTIRE WEIGHT OF THE GRATE), PLACE THE GRATE INTO ITS FRAME.

WOVEN MONOFILAMENT

AND INSPECTION OF UNIT

| | TRENCH TO BE BACKFILLED AND COMPACTED |
|------------------------------|---|
| RE UPSLOPE LAND | 10. MAINTENANCE—SILT FENCE SHALL ALLOW RUNOFF TO PASS |
| E UPSLOPE LAND | ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS THE SILT FENCE, FLOWS UNDER THE FABRIC OR AROUND THE FENCE ENDS, OR IN ANY OTHER WAY ALLOWS A |
| TO THE CONTOUR | CONCENTRATED FLOW DISCHARGE, ONE OF THE FOLLOWING |
| ICENTRATE AT LOW WALES OR | SHALL BE PERFORMED, AS APPROPRIATE: 1) THE LAYOUT OF THI SILT FENCE SHALL BE CHANGED, 2) ACCUMULATED SEDIMENT |
| | |

SEDIMENT DEPOSITS SHALL BE ROUTINELY REMOVED WHEN THE DEPOSIT REACHES APPROXIMATELY ONE-HALF OF THE HEIGHT

SHALL BE REMOVED, OR 3) OTHER PRACTICES SHALL BE

SILT FENCES SHALL BE INSPECTED AFTER EACH RAINFALL AND AT LEAST DAILY DURING A PROLONGED RAINFALL. THE LOCATION OF EXISTING SILT FENCE SHALL BE REVIEWED DAILY TO ENSURE ITS PROPER LOCATION AND EFFECTIVENESS. IF DAMAGED, THE SILT FENCE SHALL BE REPAIRED IMMEDIATELY.

1. FENCE POST - THE LENGTH SHALL BE A MINIMUM OF 32 INCHES. WOOD POSTS WILL BE 2-BY-2-IN. NOMINAL DIMENSIONED HARDWOOD OF SOUND QUALITY. THEY SHALL BE FREE OF KNOTS, SPLITS AND OTHER VISIBLE IMPERFECTIONS, THAT WILL WEAKEN THE POSTS. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT. POSTS SHALL BE DRIVEN A MINIMUM 16 INCHES INTO THE GROUND, WHERE POSSIBLE. IF NOT POSSIBLE, THE POSTS SHALL BE ADEQUATELY SECURED TO PREVENT OVERTURNING OF THE FENCE DUE TO SEDIMENT/WATER LOADING.

2. SILT FENCE FABRIC - SEE CHART BELOW.

| FABRIC PROPERTIES | VALUES | TEST METHOD |
|--------------------------------|------------------|-------------|
| MINIMUM TENSILE STRENGTH | 120 LBS. (535 N) | ASTM D 4632 |
| MAXIMUM ELONGATION AT 60 LBS | 50% | ASTM D 4632 |
| MINIMUM PUNCTURE STRENGTH | 50 LBS. (220 N) | ASTM D 4833 |
| MINIMUM TEAR STRENGTH | 40 LBS. (180 N) | ASTM D 4533 |
| APPARENT OPENING SIZE | <0.84 MM | ASTM D 4751 |
| MINIMUM PERMITTIVITY | 1X10-2 SEC-1 | ASTM D 4491 |
| UV EXPOSURE STRENGTH RETENTION | 70% | ASTM G 4355 |

SILT FENCE DETAIL

- STORM SEWER GRATE

SPECIFICATIONS

INSTALLATION: THE EMPTY DANDY BAG SHOULD BE PLACED OVER THE GRATE AS THE GRATE

STANDS ON END. IF USING OPTIONAL OIL ABSORBENTS: PLACE ABSORBENT PILLOW IN

TO TETHER LOOP. TUCK THE ENCLOSURE FLAP INSIDE TO COMPLETELY ENCLOSE THE GRATE. HOLDING THE LIFTING DEVICES (DO NOT RELY ON LIFTING DEVICES TO SUPPORT THE

POUCH, ON THE BOTTOM (BELOW-GRADE SIDE) OF THE UNIT. ATTACH ABSORBENT PILLOW

MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM SURFACE AND

VICINITY OF UNIT AFTER EACH STORM EVENT. REMOVE SEDIMENT THAT HAS ACCUMULATED

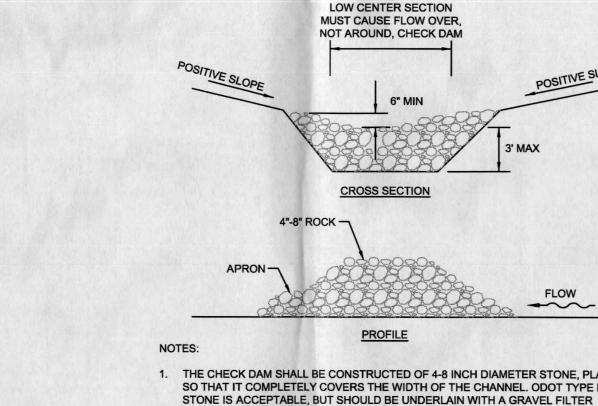
WITHIN THE CONTAINMENT AREA OF THE DANDY BAG AS NEEDED. IF USING OPTIONAL OIL

DANDY BAG DETAIL

ABSORBENTS; REMOVE AND REPLACE ABSORBENT PILLOW WHEN NEAR SATURATION.

DANDY BAG

OR APPROVED EQUAL



THE CHECK DAM SHALL BE CONSTRUCTED OF 4-8 INCH DIAMETER STONE, PLACED SO THAT IT COMPLETELY COVERS THE WIDTH OF THE CHANNEL. ODOT TYPE D STONE IS ACCEPTABLE, BUT SHOULD BE UNDERLAIN WITH A GRAVEL FILTER CONSISTING OF ODOT NO. 3 OR 4 OR SUITABLE FILTER FABRIC.

2. MAXIMUM HEIGHT OF CHECK DAM SHALL NOT EXCEED 3.0 FEET.

THE MIDPOINT OF THE ROCK CHECK DAM SHALL BE A MINIMUM OF 6 INCHES LOWER THAN THE SIDES IN ORDER TO DIRECT ACROSS THE CENTER AND AWAY FROM THE

4. THE BASE OF THE CHECK DAM SHALL BE ENTRENCHED APPROXIMATELY 6 INCHES.

5. SPACING OF CHECK DAMS SHALL BE IN A MANNER SUCH THAT THE TOE OF THE UPSTREAM DAM IS AT THE SAME ELEVATION AS THE TOP OF THE DOWNSTREAM DAM.

6. A SPLASH APRON SHALL BE CONSTRUCTED WHERE CHECK DAMS ARE EXPECTED TO BE IN USE FOR AN EXTENDED PERIOD OF TIME, A STONE APRON SHALL BE CONSTRUCTED IMMEDIATELY DOWNSTREAM OF THE CHECK DAM TO PREVENT FLOWS FROM UNDERCUTTING THE STRUCTURE. THE APRON SHOULD BE 6 IN. THICK AND ITS LENGTH TWO TIMES THE HEIGHT OF THE DAM.

STONE PLACEMENT SHALL BE PERFORMED EITHER BY HAND OR MECHANICALLY AS LONG AS THE CENTER OF CHECK DAM IS LOWER THAN THE SIDES AND EXTENDS ACROSS ENTIRE CHANNEL.

8. SIDE SLOPES SHALL BE A MINIMUM OF 2:1.

MAINTENANCE

SEDIMENT SHALL BE REMOVED FROM BEHIND CHECK DAM ONCE IT ACCUMULATES TO ONE-HALF THE ORIGINAL HEIGHT OF THE CHECK DAM.

ROCK CHECK DAM DETAIL

NOTES

- ROAD OR OTHER

EXISTING PAVED

SURFACE

- CULVERT AS NEEDED

HEAVY DUTY USE.

FOLLOWING SPECIFICATIONS:

70 FT. (OR 30 FT FOR ACCESS TO INDIVIDUAL LOT)

RIGHT OF WAY DIVERSION

AS NEEDED

18" OR SUFFICIENT

TO DIVERT RUNOFF

PLAN VIEW

PROFILE VIEW

- 1. STONE SIZE ODOT #2 (1.5-2.5 INCH) STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
- 2. LENGTH THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 70 FT. (EXCEPTION: APPLY 30 FT. MINIMUM TO SINGLE
- 3. THICKNESS THE STONE LAYER SHALL BE AT LEAST 6 INCHES THICK FOR LIGHT DUTY ENTRANCES OR AT LEAST 10 INCHES FOR
- 4. WIDTH THE ENTRANCE SHALL BE AT LEAST 14 FEET WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR
- EGRESS OCCURS. 5. GEOTEXTILE - A GEOTEXTILE SHALL BE LAID OVER THE ENTIRE

ARE PRIOR TO PLACING STONE. IT SHALL BE COMPOSED OF STRONG ROT-PROOF POLYMERIC FIBERS AND MEET THE

| MINIMUM TENSILE STRENGTH | 200 LBS |
|---------------------------|---------------------------|
| MINIMUM PUNCTURE STRENGTH | 80 LBS |
| MINIMUM TEAR STRENGTH | 50 LBS |
| MINIMUM BURST STRENGTH | 320 PSI |
| MINIMUM ELONGATION | 20% |
| EQUIVALENT OPENING SIZE | EOS< 0.6MM |
| PERMITTIVITY | 1X10 ⁻³ CM/SEC |

6. TIMING - THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AS SOON AS IS PRACTICABLE BEFORE MAJOR GRADING ACTIVITIES.

CONSTRUCTION ENTRANCE DETAIL

CULVERT - A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEED ED TO PREVENT SURFACE WATER FROM FLOWING ACROSS THE ENTRANCE OR TO PREVENT RUNOFF

FROM BEING DIRECTED OUT ONTO PAVED SURFACES. WATER BAR - A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE

CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.

MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR THE WASHING AND REWORKING OF EXISTING STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAF SEDIMENT, ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY. THE USE OF WATER TRUCKS TO REMOVE MATERIALS DROPPED, WASHED, OR TRACKED ONTO ROADWAYS WILL NOT BE PERMITTED UNDER ANY CIRCUMSTANCES. TOP DRESSING OF ADDITIONAL STONE SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS, OR ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS, SHALL BE REMOVE IMMEDIATELY. REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING.

10. CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE TRACKING, VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION-SITE SHALL BE RESTRICTED FROM MUDDY

11. REMOVAL - THE ENTRANCE SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS STABILIZED OR REPLACED WITH A PERMANENT ROADWAY OR ENTRANCE.

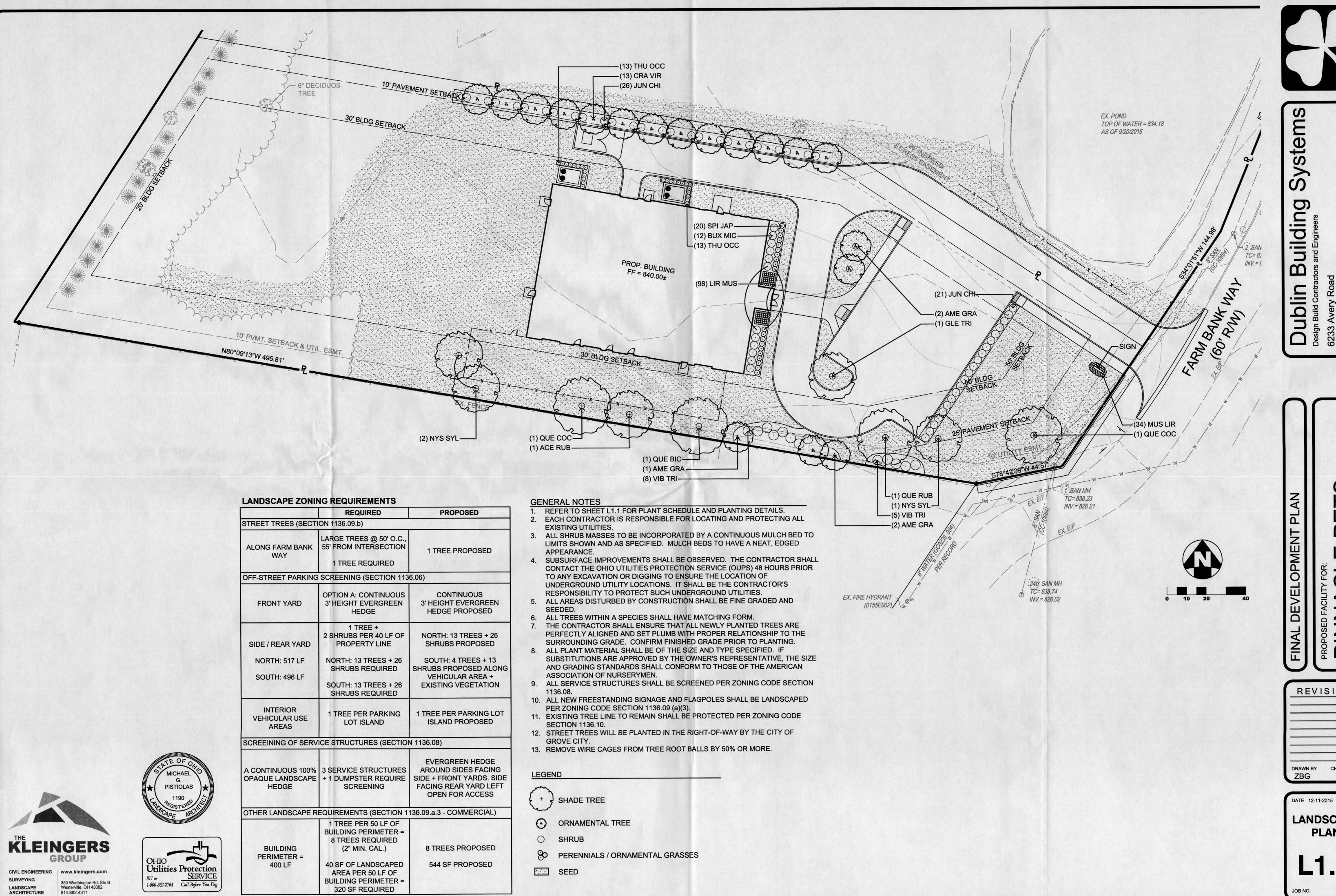
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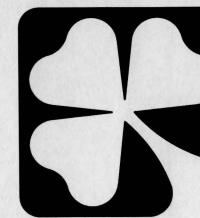
REVISIONS

DRAWN BY CHECKED BY

DATE 12-11-2015

EROSION CONTROL **DETAILS**





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REVISIONS

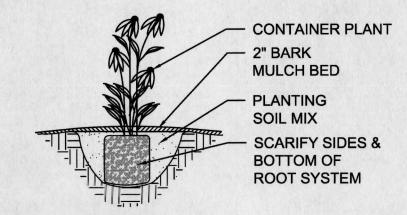
CHECKED BY

MJC ZBG

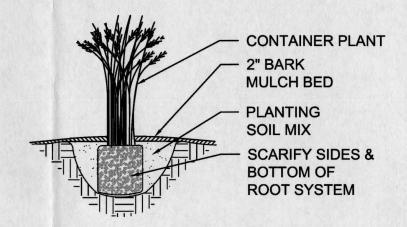
LANDSCAPE

PLANTING SCHEDULE

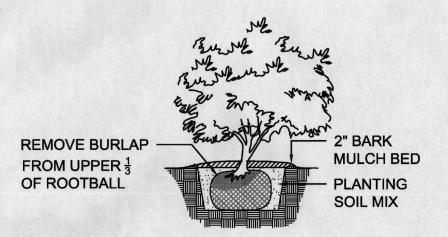
| KEY | BOTANICAL NAME | COMMON NAME | SIZE | ROOT | REMARKS |
|----------|---|--------------------------------|--------------|-------|---------------|
| DECIDUOL | JS TREES: | | | | |
| ACE RUB | ACER RUBURM 'OCTOBER GLORY' | OCTOBER GLORY RED MAPLE | 2" CAL. | B&B | |
| AME GRA | AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE' | AUTUMN BRILLIANCE SERVICEBERRY | 6' HT. MIN. | B&B | CLUMP |
| CRA VIR | CRATAEGUS VIRIDIS 'WINTER KING' | WINTER KING HAWTHORN | 2" CAL. | B&B | TREE FROM |
| GLE TRI | GLEDITSIA TRIACANTHOS INERMIS 'SKYLINE' | SKYLINE HONEYLOCUST | 2" CAL. | B&B | |
| NYS SYL | NYSSA SYLVATICA | BLACK GUM | 2" CAL. | B&B | |
| QUE BIC | QUERCUS BICOLOR | SWAMP WHITE OAK | 2" CAL. | B&B | |
| QUE COC | QUERCUS COCCINEA | SCARLET OAK | 2" CAL. | B&B | |
| QUE RUB | QUERCUS RUBRA | RED OAK | 2" CAL. | B&B | |
| | | | | | |
| SHRUBS: | | | | | |
| BUX MIC | BUXUS MICROPHYLLA 'WINTER GEM' | WINTER GEM BOXWOOD | 30" HT. MIN. | B&B | SPACE 4' O.C. |
| JUN CHI | JUNIPERUS CHINENSIS 'SEA GREEN' | SEA GREEN JUNIPER | 36" HT. MIN. | B&B | SPACE 4' O.C. |
| SPI JAP | SPIREAE JAPONICA 'LITTLE PRINCESS' | LITTLE PRINCESS SPIREA | 18" HT. MIN. | CONT. | SPACE 30" O.C |
| THU OCC | THUJA OCCIDENTALIS 'DEGROOT'S SPIRE' | DEGROOT'S SPIRE ARBORVITAE | 5' HT. MIN. | B&B | SPACE 3' O.C. |
| VIB TRI | VIBURNUM TRILOBUM 'COMPACTUM' | COMPACT AMERICAN CRANBERRYBUSH | 2" HT. MIN. | B&B | SPACE 5' O.C. |
| | | | | | |
| GOUNDCO | VERS AND PERENNIALS: | | | | |
| LIR MUS | LIRIOPE MUSCARI 'BIG BLUE' | BIG BLUE LILYTURF | #2 | CONT. | SPACE 12" O.C |



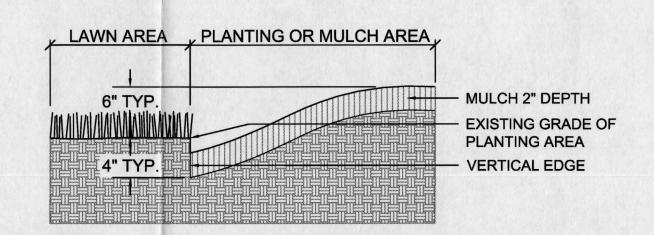
PERENNIAL / GROUNDCOVER PLANTING N.T.S.



ORNAMENTAL GRASS PLANTING N.T.S.

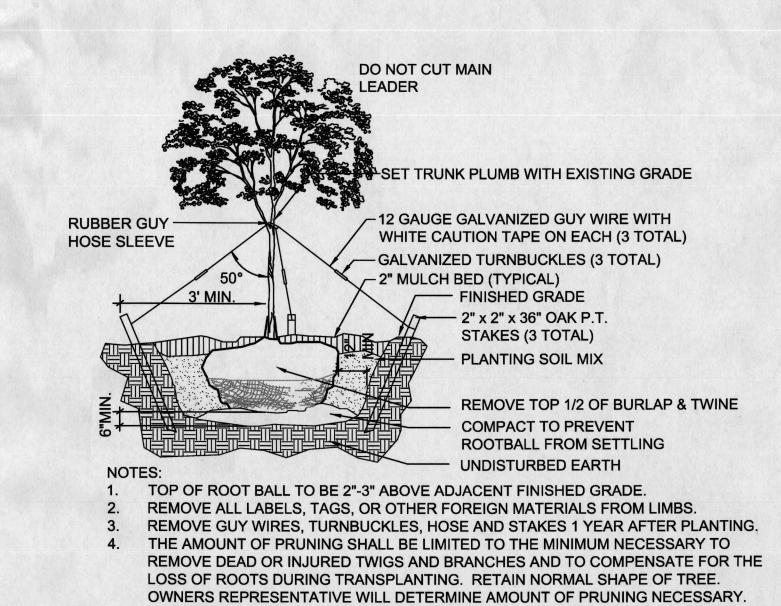


3 SHRUB PLANTING N.T.S.



PLANTING BED TRENCH DETAIL

NOT TO SCALE



PLANT TREES AT SAME GRADE AS GROWN IN THE NURSERY.

5 DECIDUOUS TREE PLANTING N.T.S.



350 Worthington Rd, Ste B Westerville, OH 43082 ARCHITECTURE 614.882.4311



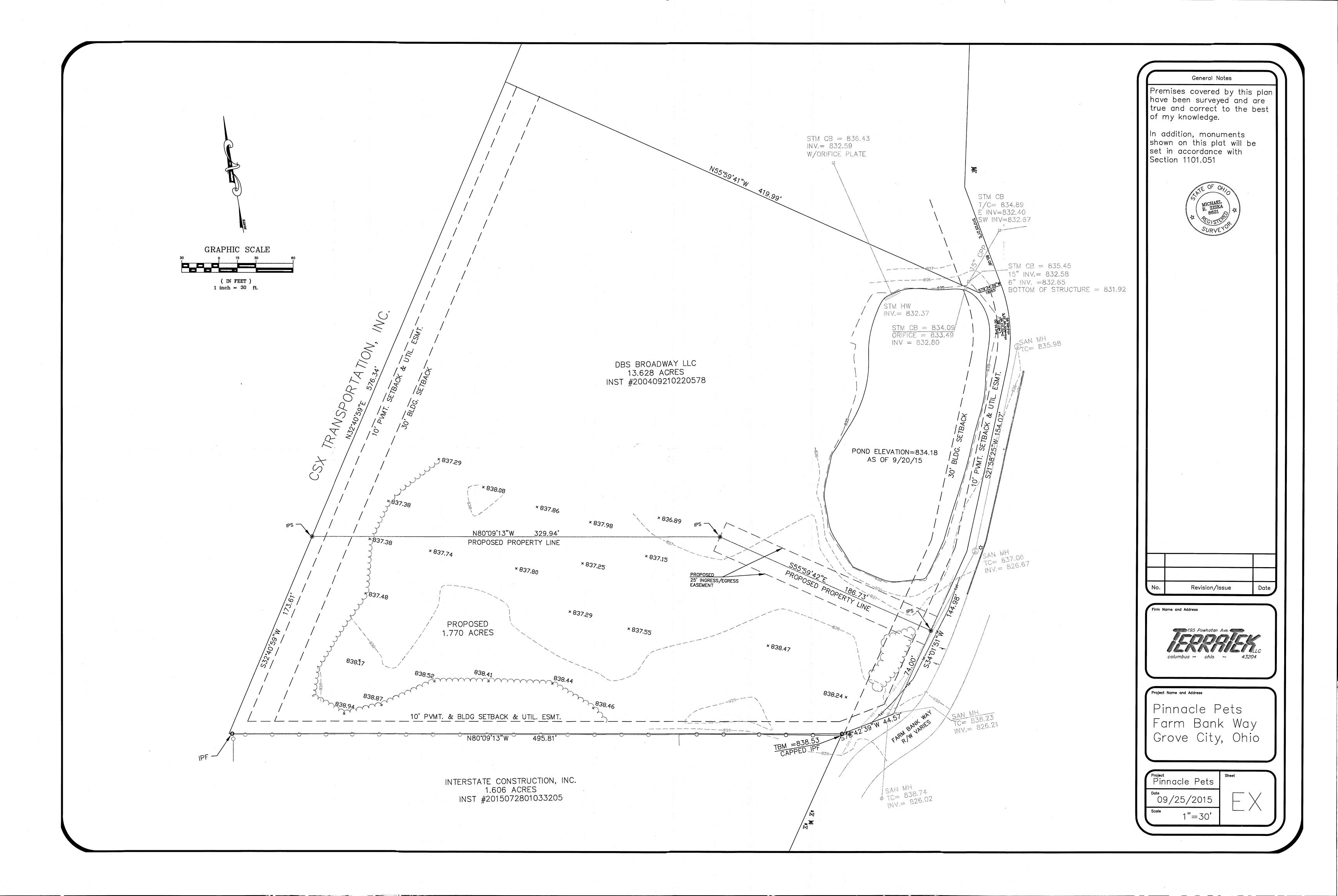


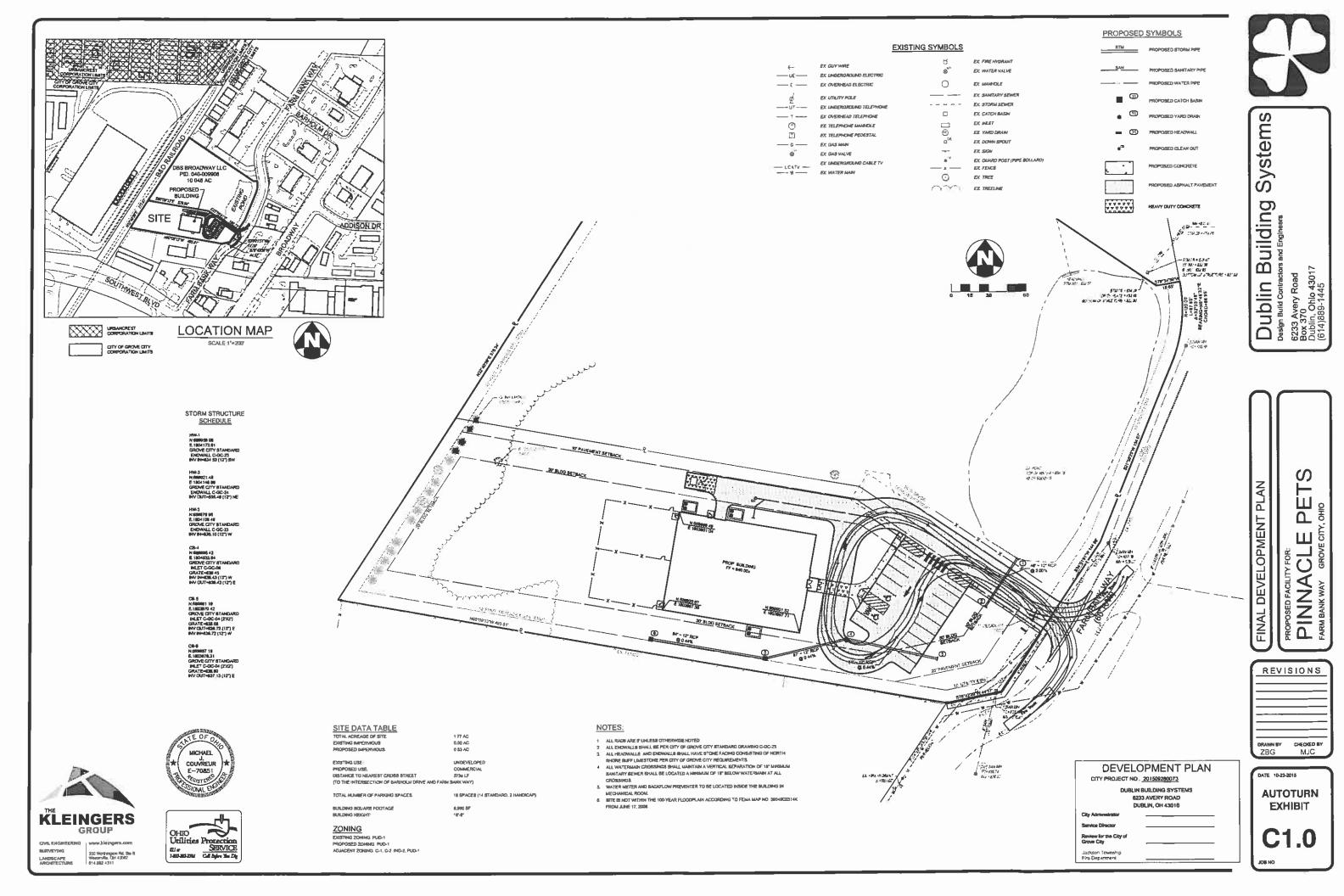
REVISIONS DRAWN BY CHECKED BY ZBG MJC

Systems

ublin Building

DATE 12-11-2015 LANDSCAPE NOTES & **DETAILS**







170 MILL STREET, GAHANNA, OHIO 43230-3036 614-471-5150 • FAX 614-471-9286

May 31, 2005

Mr. James F. Olausen, P.E. Civil Design Engineering, Inc. 6813 Hayhurst Street Worthington, Ohio 43085

Re:

Broadway Professional Village

City of Grove City, Ohio

Dear Mr. Olausen:

We have completed our review of the grading plan and stormwater calculations associated with Broadway Professional Village in Grove City, Ohio. The City has the following comments:

- Please provide outlet rating and pond routings for the water quality basin, similar to those
 provided for the parking lot detention facility. We would like to ensure that the water
 quality facility, with the proposed primary and secondary outlets, produces discharges
 from the site that meet the City's critical storm requirements for allowable discharge.
- 2. Please provide a note in the report which indicates what, if any, changes would need to be made to the outlet appurtenances at the water quality basin based on assumptions of build-out and the current condition of the 5.04 acres of Phase 2.

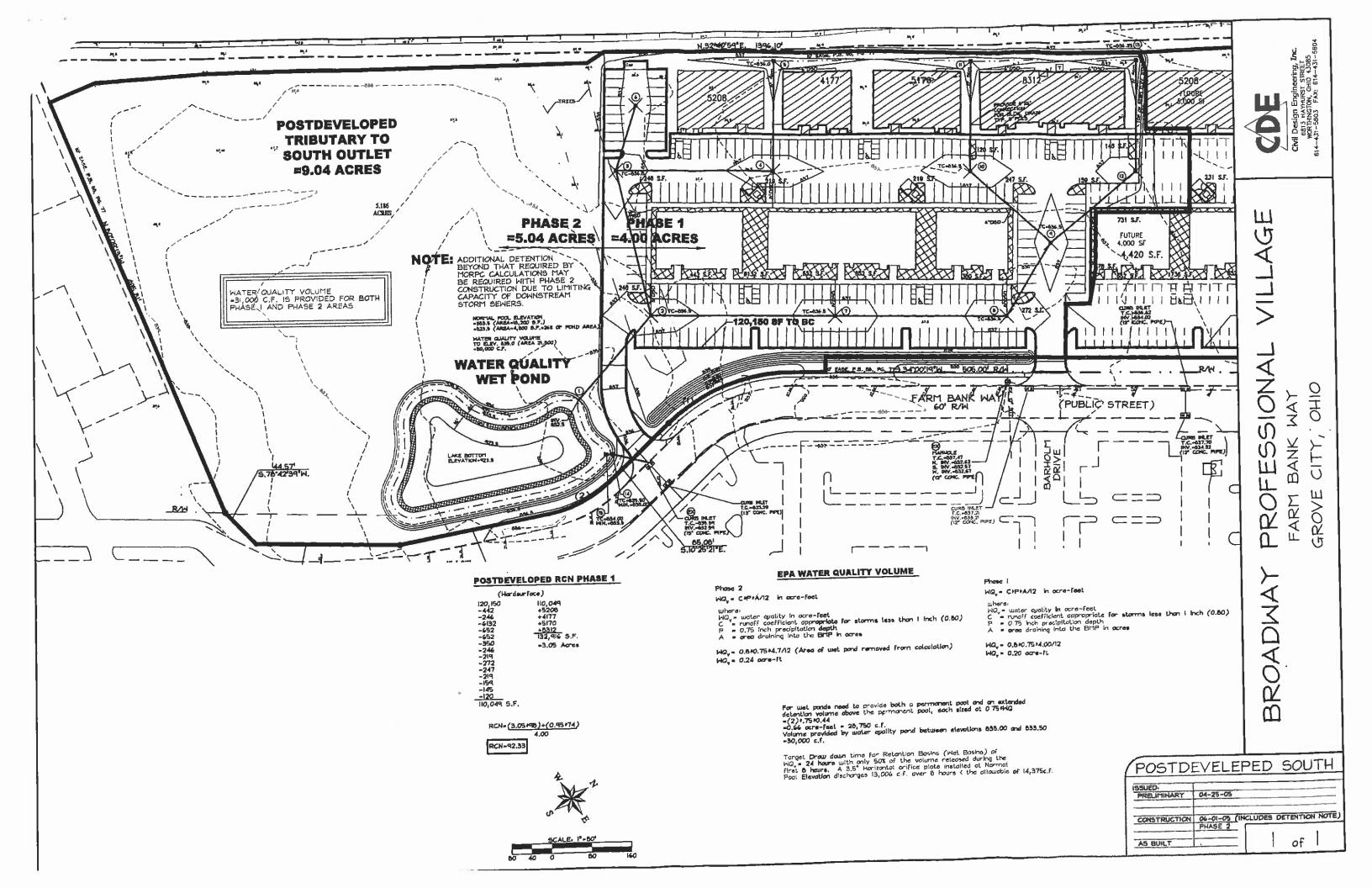
Please feel free to contact Bob Davis or myself with any question or concerns you may have regarding these comments at (614) 471-5150.

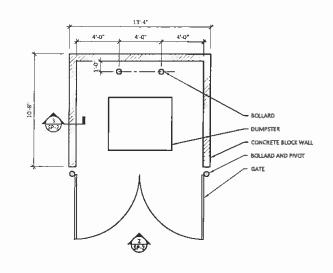
Sincerely,

EVANS, MECHWART, HAMBLETON & TILTON, INC.

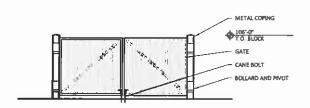
Marcia M. Bland, P.E.

Cc: File: Ltr-olausen-BroadwayProfessionalVillage_StormReview



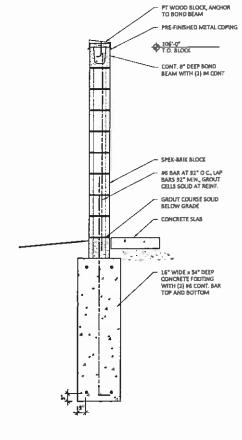




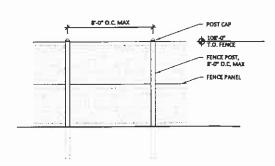


DUMPSTER ENCLOSURE ELEVATION

2
SP-2
1/4*=1'-0"



DUMPSTER ENCLOSURE SECTION
3/4" # 1"-0"



FENCE ELEVATION

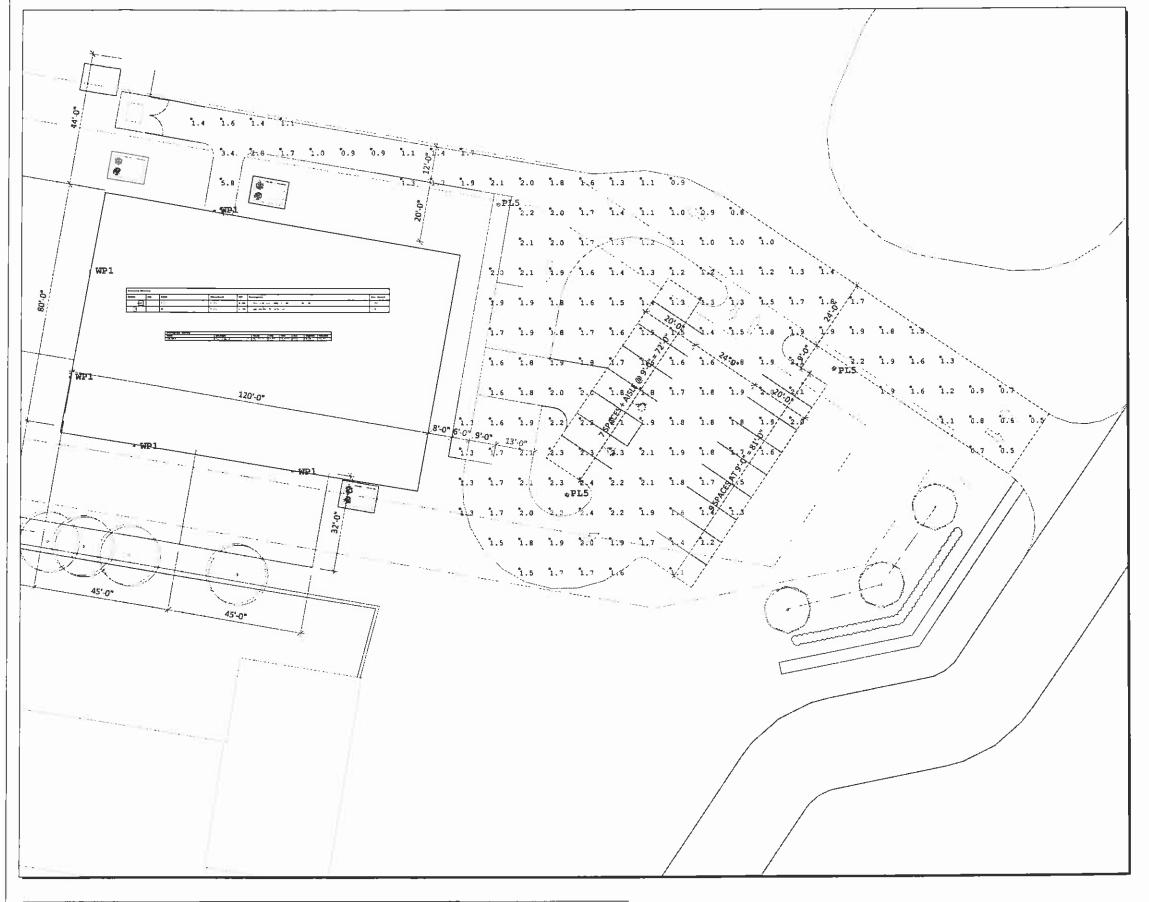
1/4" * 1"-0"











| Luminaira Schadula | | | | | | | | |
|--------------------|-----|-------|-------------|-------|---|-------------|--|--|
| Symbol . | Öch | Lahel | Arrangement | LILP | Description | Lun. Lumans | | |
| -E | 3 | PL5 | SINGLE | 0.900 | GLEON-AE-04-LED-E1-5WQ (213 WATTS LED, TYPE 5W) | 21803 | | |
| | 5 | WP1 | SINGLE | 0.900 | LUMARK KTOR9A (79 WATTS LED) | 7084 | | |

| Calculation Sum | eary . | | | | | | |
|-----------------|-------------|-------|------|-----|-----|---------|---------|
| Label | CalcType | Doits | yad | Man | Kin | Avg/Hin | Max/Min |
| CalcPts | Illuminance | Fc | 1.67 | 5.8 | 0.5 | 3.34 | 11.60 |



LUMARK XTOR SERIES



MCGRAW EDISON GALLEON SERIES

NOTES: 1. ALL CALC POINTS AT GRADE.

2. ALL POLE FIXTURES MOUNTED AT 25' ABOVE GRADE.
3. ALL WALL FIXTURES MOUNTED AT 20' ABOVE GRADE.

PET PINNACLE GROVE CITY SITE LIGHTING ANALYSIS REV 2



SPECTRUM LIGHTING 700 TAYLOR AVE. COLUMBUS, OH 43219 www.spectrumohio.com

McGraw-Edison

DESCRIPTION

The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated.

| Catalog # | GLEON-AE-04-LED-E1-5WQ | Туре |
|-------------|------------------------|---------|
| Project | PINNACLE PETS | PL5 |
| Comments | | Date |
| Prepared by | | 9/24/15 |

SPECIFICATION FEATURES

Construction

Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, diecast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested. Optional toolless hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics

Choice of 16 patented, highefficiency AccuLED Optics. The optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 6000K CCT and 3000K CCT. For the ultimate level of spill light control, an optional house side shield accessory can be field or factory installed. The

house side shield is designed to seamlessly integrate with the SL2, SL3, SL4 or AFL optics.

Electrical

LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only, Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with embient temperatures exceeding 40°C. specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 530mA and 700mA drive currents.

Mounting

Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during

assembly. Designed for pole or wall mounting. When mounting two or more luminaires at 90° or 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table on page 3. Round pole top adapter included. For wall mounting, specify wall mount bracket option. 3G vibration rated.

Finish

Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult the McGraw-Edison Architectural Colors brochure for the complete selection.

Warranty

Five-vear warranty.



GLEON GALLEON LED

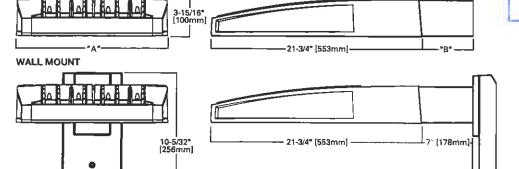
1-10 Light Squares Solid State LED

AREA/SITE LUMINAIRE



SEP 2 8 2015

GC PL MNING COMMISSION



DIMENSION DATA

DIMENSIONS POLE MOUNT

| Number of Light Squares "A" Width | | "B" Standard Arm Length | "8" Optional Arm Length 1 | Weight with Arm (lbs.) | EPA with Arm * (Sq. Ft.) |
|--------------------------------------|-----------------|----------------------------|------------------------------|---------------------------|-----------------------------|
| 1-4 | 15-1/2" (394mm) | 7" (178mm) | 10" (254mm) | 33 (15.0 kgs.) | 0.96 |
| 5-6 | 21-5/8" (549mm) | 7" (178mm) | 10° (254mm) | 44 (20.0 kgs.) | 1.00 |
| 7-8 | 27-5/8" (702mm) | 7" (178mm) | 13" (330mm) | 54 (24.5 kgs.) | 1.07 |
| 9-10 | 33-3/4* (857mm) | 7* (178mm) | 16" (406mm) | 63 (28.6 kgs.) | 1.12 |

NOTES: 1 Extended arm option may be required when thoughing two or more futures per pole at 90° or 120°. Refer to arm mountain sent table, 2 EPA calculated with optional arm length

6-3/16° [157mm]



CERTIFICATION DATA

ULCUL Wet Location Listed ISO 9001 LM79 / LM80 Compilent **3G Vibration Rated** IP66 Rated DasignUghts Consortium® Qualified®

ENERGY DATA

Electronic LED Driver >0.9 Power Factor

<20% Total Harmonic Distortion 120V-277V 50/60Hz 347V & 480V 60Hz

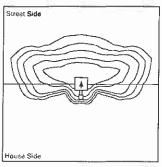
40°C Min. Temperature 40°C Max. Temperature

50°C Max. Temperature (HA Option)

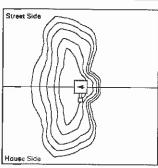




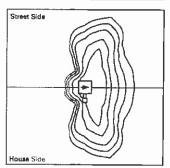
OPTIC ORIENTATION



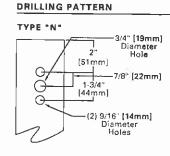
Standard



Optics Rotated Left @ 90* [L90]



Optics Rotated Right @ 90° [R90]



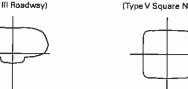
OPTICAL DISTRIBUTIONS

Asymmetric Area Distributions T2 SL2 Т3 SL₃ T4FT T4W SL₄ (Type II) (Type II with Spill Control) (Type III) (Type III with SplII Control) (Type IV Forward Throw) (Type IV Wide) (Type IV with Splil Control) Asymmetric Roadway Distributions Symmertric Distributions T2R RW T3R 5NQ 5MQ 5WQ (Rectangular Wide Type I) (Type II Roadway) (Type III Roadway) (Type V Square Narrow) (Type V Square Medium) (Type V Square Wide)

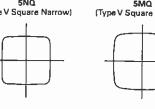


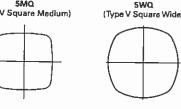




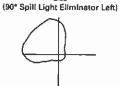


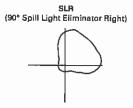
Specialized Distributions:





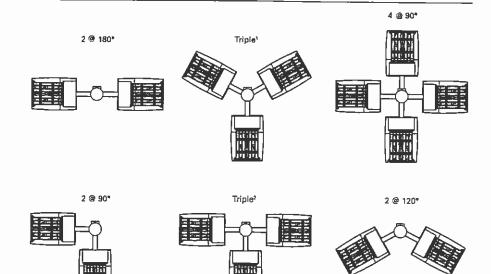






ARM MOUNTING REQUIREMENTS

| Configuration | 90" Apart | 120" Apart |
|---------------|--------------------------------|--------------------------------|
| GLEON-AE-01 | 7° Arm (Standard) | 7* Arm (Standard) |
| GLEON-AE-02 | 7° Arm (Slandard) | 7" Arm (Standard) |
| GLEON-AE-03 | 7° Arm (Standard) | 7" Arm (Standard) |
| GLEON-AE-04 | 7" Arm (Standard) | 7" Arm (Standard) |
| GLEON-AE-05 | 10° Extended Arm (Required) | 7" Arm (Standard) |
| GLEON-AE-06 | 10" Extended Arm (Required) | 7* Arm (Standard) |
| GLEON-AE-07 | 13" Extended Arm (Required) | 13" Extended Arm (Required) |
| GLEON-AE-08 | 13° Extended Arm (Required) | 13" Extended Arm (Required) |
| GLEON-AE-09 | 16" Extended Arm (Required) | 16° Extended Arm (Required) |
| GLEON-AE-10 | 16° Extended Arm (Required) | 16° Extended Arm (Required) |



NOTES: 1 Round poies are 3 @ 120° Square poles are 3 @ 90° 2 Round poies are 3 @ 90°



Specifications and dimensions subject to change without notice

| Number | f Light Squares | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|------------|-----------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Drive Curi | rent | 1A |
| Nominal F | ower (Watts) | 56 | 107 | 157 | 213 | 264 | 315 | 370 | 421 | 475 | 528 |
| Input Cur | rent @ 120V (A) | 0 47 | 0.90 | 1.31 | 1.79 | 2.21 | 2 64 | 3.09 | 3.51 | 3.96 | 4.41 |
| Input Cun | rent @ 208V (A) | 0.28 | 0.51 | 0.74 | 1.02 | 1.25 | 1.48 | 1.76 | 1.99 | 2.22 | 2.50 |
| Input Cun | rent @ 240V (A) | 0 25 | 0.45 | 0.65 | 0.90 | 1.10 | 1.30 | 1.55 | 1.75 | 1.95 | 2.20 |
| Input Curr | rent @ 277V (A) | 0.23 | 0.41 | 0.59 | 0.82 | 1.00 | 1.18 | 1,41 | 1.59 | 1.77 | 2.00 |
| Optica | | | | - | - | | | | | | |
| | Lumens | 5,272 | 10,303 | 15,373 | 20,313 | 25,168 | 30,118 | 35,618 | 40,357 | 45,018 | 49,842 |
| T2 | BUG Rating | B1-U0-G1 | B2-U0-G2 | B2-U0-G2 | B3-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G5 | 84-U0-G5 | B4-U0-G5 |
| L | Lumens | 5,597 | 10,938 | 16,321 | 21,565 | 26,719 | 31,974 | 37,813 | 42,844 | 47,792 | 52,914 |
| T2R | BUG Rating | B1-U0-G1 | B2-U0-G2 | B2-U0-G2 | B3-U0-G3 | B3-U0-G3 | B3-U0-G4 | 83-U0-G4 | B3-U0-G4 | B4-U0-G4 | B4-U0-G5 |
| | Lumens | 5,374 | 10,501 | 15,669 | 20,704 | 25,652 | 30,697 | 36,303 | 41,134 | 45,884 | 50,802 |
| Т3 | BUG Rating | B1-U0-G2 | B2-U0-G2 | B2-U0-G3 | B3-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G5 | B3-U0-G5 | B4-U0-G5 | B4-U0-G5 |
| 1. | Lumens | 5,493 | 10,735 | 16,017 | 21,164 | 26,222 | 31,379 | 37,110 | 42,048 | 46,904 | 51,930 |
| T3R | BUG Rating | B1-U0-G2 | B1-U0-G2 | B2-U0-G3 | B2-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 |
| | Lumens | 5,405 | 10,562 | 15,760 | 20,824 | 25,801 | 30,875 | 36,514 | 41,372 | 46,150 | 51,096 |
| T4FT | BUG Rating | B1-U0-G2 | B2-U0-G2 | B2-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 |
| _ | Lumens | 5,335 | 10,426 | 15,556 | 20,555 | 25,468 | 30,476 | 36,042 | 40,838 | 45,554 | 50,436 |
| T4W | BUG Rating | B1-U0-G2 | B2-U0-G2 | B2-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G5 | B3-U0-G5 | B4-U0-G5 | B4-U0-G5 | B4-U0-G5 |
| | Lumens | 5,263 | 10,285 | 15,347 | 20,278 | 25,124 | 30,066 | 35,556 | 40,288 | 44,940 | 49,756 |
| SL2 | BUG Rating | B1-U0-G2 | B2-U0-G2 | B2-U0-G3 | B3-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G5 | B3-U0-G5 | B4-U0-G5 | B4-U0-G5 |
| | Lumens | 5,373 | 10,500 | 15,667 | 20,701 | 25,649 | 30,693 | 36,298 | 41,128 | 45,87B | 50,794 |
| SL3 | BUG Rating | B1-U0-G2 | 82-U0-G3 | B2-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 |
| | Lumens | 5,105 | 9,976 | 14,886 | 19,669 | 24,370 | 29,163 | 34,488 | 39,078 | 43,591 | 48,262 |
| SL4 | BUG Rating | B1-U0-G2 | B1-U0-G3 | B1-U0-G3 | B2-U0-G4 | B2-U0-G4 | B2-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 |
| | Lumens | 5,542 | 10,830 | 16,160 | 21,352 | 26,455 | 31,658 | 37,439 | 42,421 | 47,320 | 52,392 |
| 5NQ | BUG Rating | B2-U0-G1 | B3-U0-G1 | B3-U0-G2 | B4-U0-G2 | 84-U0-G2 | B5-U0-G2 | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 | B5-U0-G4 |
| | Lumens | 5,644 | 11,029 | 16,457 | 21,745 | 26,942 | 32,241 | 38,128 | 43,202 | 48,191 | 53,356 |
| 5MQ | BUG Rating | B3-U0-G1 | B4-U0-G2 | B4-U0-G2 | B5-U0-G3 | B5-U0-G3 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G5 |
| | Lumens | 5,659 | 11,059 | 16,501 | 21,803 | 27,014 | 32,327 | 38,230 | 43,317 | 48,320 | 53,498 |
| 5WQ | BUG Rating | B3-U0-G1 | B4-U0-G2 | B4-U0-G2 | B5-U0-G3 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | 85-U0-G5 | 85-U0-G5 | B5-U0-G5 |
| | Lumens | 4,722 | 9,227 | 13,767 | 18,191 | 22,539 | 26,971 | 31,897 | 36,141 | 40,315 | 44,635 |
| SLL/SLR | BUG Rating | B1-U0-G2 | B1-U0-G3 | B2-U0-G3 | B2-U0-G3 | B3-U0-G4 | 83-U0-G4 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 |
| | Lumens | 5,492 | 10,732 | 16,014 | 21,159 | 26,216 | 31,372 | 37,101 | 42,D38 | 46,893 | 51,918 |
| RW | BUG Rating | B2-U0-G1 | B3-U0-G1 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 | B5-U0-G4 | B5-U0-G4 |
| | Lumens | 5,512 | 10,771 | 16,072 | 21,236 | 26,311 | 31,486 | 37,236 | 42,191 | 47,063 | 52,107 |
| AFL | BUG Rating | B1-U0-G1 | B1-U0-G1 | B2-U0-G2 | B2-U0-G2 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G4 |

^{*} Nominal data for 4000K CCY.

LUMEN MULTIPLIER

| Amblent Temperature | Lumen Multipiler |
|------------------------|------------------|
| 0°C | 1.02 |
| 10°C | 1.01 |
| 25*C | 1.00 |
| 40°C | 0.99 |
| 50°C | 0.97 |

| Ambient Temperature | TM-21 Lumen Maintenance (60,000 Hours) | Theoretical L70 (Hours) |
|------------------------|--|----------------------------|
| 25°C | > 94% | > 350,000 |
| 40°C | > 93% | > 250,000 |
| 50°C* | > 90% | > 170,000 |

 ^{50°}C lumen maintenance data applies to 530mA and 700mA drive currents.



| Number | f Light Squares | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 6 | 9 | 10 |
|-----------|------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Drive Cur | rent | 700mA |
| Nominal I | Power (Walts) | 38 | 72 | 105 | 138 | 176 | 210 | 243 | 276 | 314 | 348 |
| Input Cur | rant @ 120V (A) | 0.32 | 0.59 | 0.86 | 1.14 | 1.45 | 1.72 | 2 | 2.28 | 2.58 | 2 86 |
| Input Cun | rent @ 208V (A) | 0.21 | 0.36 | 0.51 | 0.67 | 0.87 | 1.02 | 1.18 | 1.34 | 1.53 | 1.69 |
| Input Cun | rent @ 240V (A) | 0.19 | 0.32 | 0.45 | 0.59 | 0.77 | 0.90 | 1.04 | 1.18 | 1.35 | 1.49 |
| Input Cun | rent G 277V (A) | 0.20 | 0.29 | 0.40 | 0.51 | 0.69 | 0.80 | 0.91 | 1.02 | 1.20 | 1.31 |
| Optics | | | | | | | | | | | |
| T2 | Lumens | 3,854 | 7,531 | 11,237 | 14,847 | 18,395 | 22,013 | 26,033 | 29,497 | 32,904 | 36,430 |
| 12 | BUG Rating | B1-U0-G1 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B3-U0-G3 | B3-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 |
| T2R | Lumens | 4,091 | 7,995 | 11,929 | 15,762 | 19,529 | 23,370 | 27,638 | 31,316 | 34,932 | 38,676 |
| 1211 | BUG Rating | B1-U0-G1 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 |
| тз | Lumens | 3,928 | 7,676 | 11,453 | 15,133 | 18,750 | 22,437 | 26,534 | 30,065 | 33,537 | 37,132 |
| 13 | BUG Rating | B1-U0-G1 | B1-U0-G2 | B2-U0-G2 | B2-U0-G3 | B3-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G5 |
| T3R | Lumens | 4,015 | 7,846 | 11,707 | 15,469 | 19,166 | 22,936 | 27,124 | 30,733 | 34,283 | 37,957 |
| ian | BUG Rating | B1-U0-G1 | B1-U0-G2 | B2-U0-G2 | B2-U0-G3 | B2-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G5 | B3-U0-G5 |
| T4FT | Lumens | 3,951 | 7,720 | 11,519 | 15,221 | 18,858 | 22,567 | 26,688 | 30,240 | 33,732 | 37,347 |
| IHE | BUG Rating | B1-U0-G1 | B1-U0-G2 | B2-U0-G2 | 82-U0-G3 | B2-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 |
| T4W | Lumens | 3,900 | 7,620 | 11,370 | 15,024 | 18,615 | 22,276 | 26,343 | 29,849 | 33,296 | 36,864 |
| 1444 | BUG Rating | B1-U0-G1 | B1-U0-G2 | B2-U0-G2 | 82-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G5 | B3-U0-G5 | B3-U0-G5 |
| SL2 | Lumens | 3,847 | 7,518 | 11,217 | 14,821 | 18,364 | 21,975 | 25,988 | 29,447 | 32,847 | 36,368 |
| SLZ | BUG Rating | B1-U0-G1 | B1-U0-G2 | B2-U0-G3 | B2-U0-G3 | 83-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | E3-U0-G5 |
| SL3 | Lumens | 3,927 | 7,675 | 11,451 | 15,131 | 18,747 | 22,434 | 26,531 | 30,061 | 33,533 | 37,126 |
| 2LJ | BUG Rating | B1-U0-G1 | B1-U0-G2 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G5 | B3-U0-G5 |
| SL4 | Lumens | 3,731 | 7,292 | 10,880 | 14,376 | 17,812 | 21,315 | 25,208 | 28,562 | 31,861 | 35,275 |
| 3L4 | BUG Rating | 81-U0-G2 | B1-U0-G2 | B1-U0-G3 | B1-U0-G3 | B2-U0-G4 | B2-U0-G4 | B2-U0-G4 | B2-U0-G5 | B2-U0-G5 | B3-U0-G5 |
| 5NQ | Lumens | 4,051 | 7,916 | 11,811 | 15,606 | 19,336 | 23,139 | 27,365 | 31,006 | 34,587 | 38,294 |
| SNQ | BUG Rating | B2-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | 85-U0-G2 | 85-U0-G3 | B5-U0-G3 |
| 5MQ | Lumens | 4,125 | 8,062 | 12,029 | 15,894 | 19,692 | 23,565 | 27,869 | 31,577 | 35,224 | 38,999 |
| DIMICI | BUG Rating | B2-U0-G1 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | B5-U0-G3 | B5-U0-G3 | 85-U0-G3 | B5-U0-G4 | B5-U0-G4 |
| 5WQ | Lumens | 4,138 | 8,083 | 12,061 | 15,936 | 19,745 | 23,628 | 27,943 | 31,661 | 35,318 | 39,103 |
| 3440 | BUG Rating | B3-U0-G1 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 | B5-U0-G3 | B5-U0-G3 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 | B5-U0-G4 |
| SLL/SLR | Lumens | 3,451 | 6,744 | 10,063 | 13,296 | 16,474 | 19,714 | 23,314 | 26,418 | 29,467 | 32,625 |
| SLL/SLM | BUG Rating | B1-U0-G1 | B1-U0-G2 | B1-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G5 | B3-U0-G5 |
| ENAL | Lumens | 4,014 | 7,844 | 11,704 | 15,465 | 19,162 | 22,930 | 27,118 | 30,726 | 34,274 | 37,948 |
| RW | BUG Rating | B2-U0-G1 | B3-U0-G1 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 |
| AEI | Lumens | 4,029 | 7,873 | 11,747 | 15,522 | 19,231 | 23,014 | 27,216 | 30,838 | 34,399 | 38,086 |
| AFL | BUG Rating | B1-U0-G1 | B1-U0-G1 | B2-U0-G2 | 82-U0-G2 | 82-U0-G2 | B3-U0-G2 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 |

^{*} Nominal data for 4000K CCT.

LUMEN MULTIPLIER

| Ambient Temperature | Lumen Multiplier |
|------------------------|------------------|
| 0°C | 1.02 |
| 10°C | 1.01 |
| 25°C | 1.00 |
| 40°C | 0.99 |
| 50°C | 0.97 |

| Ambient Temperature | Maintenance | |
|------------------------|-------------|-----------|
| 25°C | > 94% | > 350,000 |
| 40°C | > 93% | > 250,000 |
| 50°C" | > 90% | > 170,000 |

 ^{50°}C lumen maintenance data applies to 530mA and 700mA drive currents.



| Number o | of Light Squares | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-----------|------------------------|----------|----------|----------|----------|----------|----------|----------|----------|---------------------------------------|----------|
| Drive Cur | rent | 530mA | 530mA |
| Nominal F | Power (Watts) | 30 | 54 | 80 | 105 | 130 | 159 | 184 | 209 | 234 | 259 |
| Input Cur | rent © 120V (A) | 0.25 | 0.45 | 0.66 | 0.86 | 1.07 | 1.32 | 1.52 | 1.72 | 1.93 | 2.14 |
| Input Cun | rent @ 208V (A) | 0.17 | 0 28 | 0.39 | 0.51 | 0 63 | 0.78 | 0.9 | 1.02 | 1.14 | 1.26 |
| Input Cun | rent @ 240V (A) | 0.17 | 0.25 | 0.35 | 0.45 | 0.55 | 0.70 | 0.80 | 0.90 | 1.00 | 1.10 |
| Input Cun | rent @ 277V (A) | 0 19 | 0.24 | 0.32 | 0.40 | 0.49 | 0.64 | 0.72 | 0.80 | 0.89 | 0.98 |
| Optics | | | | | | | | | • | · · · · · · · · · · · · · · · · · · · | |
| T2 | Lumens | 3,079 | 6,017 | 8,978 | 11,862 | 14,697 | 17,588 | 20,800 | 23,567 | 26,289 | 29,106 |
| 12 | BUG Rating | B1-U0-G1 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B3-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G4 | B3-U0-G4 |
| TOD | Lumena | 3,269 | 6,388 | 9,531 | 12,593 | 15,603 | 18,672 | 22,082 | 25,020 | 27,909 | 30,900 |
| T2R | BUG Raling | B1-U0-G1 | B1-U0-G1 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | 83-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G4 |
| Ta | Lumens | 3,138 | 6,133 | 9,150 | 12,091 | 14,980 | 17,926 | 21,200 | 24,021 | 26,795 | 29,667 |
| Т3 | BUG Rating | B1-U0-G1 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 |
| T3R | Lumens | 3,208 | 6,269 | 9,354 | 12,359 | 15,313 | 18,325 | 21,671 | 24,555 | 27,390 | 30,326 |
| ISM | BUG Rating | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B2-U0-G2 | B2-U0-G3 | B2-U0-G3 | B2-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 |
| 7457 | Lumens | 3,156 | 6,168 | 9,203 | 12,161 | 15,067 | 18,030 | 21,323 | 24,160 | 26,950 | 29,839 |
| T4FT | BUG Rating | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B2-U0-G2 | 82-U0-G3 | B2-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G5 |
| T401 | Lumens | 3,116 | 6,088 | 9,084 | 12,004 | 14,872 | 17,797 | 21,047 | 23,848 | 28,802 | 29,453 |
| T4W | BUG Rating | B1-U0-G1 | B1-U0-G2 | B2-U0-G2 | B2-U0-G2 | 82-U0-G3 | B3-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G5 |
| SL2 | Lumens | 3,074 | 6,006 | 8,962 | 11,842 | 14,672 | 17,558 | 20,764 | 23,527 | 26,244 | 29,056 |
| SLZ | BUG Rating | B1-U0-G1 | B1-U0-G2 | B2-U0-G2 | B2-U0-G3 | B2-U0-G3 | B3-U0-G3 | B3-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 |
| SL3 | Lumens | 3,138 | 6,132 | 9,149 | 12,089 | 14,978 | 17,924 | 21,197 | 24,018 | 26,791 | 29,662 |
| 21.3 | BUG Rating | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 | B3-U0-G4 |
| CI 4 | Lumens | 2,981 | 5,826 | 8,693 | 11,486 | 14,231 | 17,030 | 20,140 | 22,820 | 25,456 | 28,184 |
| SL4 | BUG Rating | B0-U0-G1 | B1-U0-G2 | 81-U0-G3 | B1-U0-G3 | B1-U0-G3 | B2-U0-G3 | 82-U0-G4 | B2-U0-G4 | B2-U0-G4 | B2-U0-G5 |
| 5NQ | Lumens | 3,236 | 6,324 | 9,437 | 12,469 | 15,449 | 18,487 | 21,863 | 24,773 | 27,634 | 30,595 |
| SNG | BUG Rating | B1-U0-G0 | B2-U0-G1 | B3-U0-G1 | B3-U0-G2 | B3-U0-G2 | 84-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | B5-U0-G2 |
| 5MQ | Lumens | 3,296 | 6,441 | 9,610 | 12,698 | 15,733 | 18,828 | 22,266 | 25,229 | 28,142 | 31,158 |
| DINIC | BUG Rating | B2-U0-G1 | B3-U0-G1 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | 85-U0-G3 | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 |
| 5WQ | Lumena | 3,305 | 6,458 | 9,636 | 12,732 | 15,775 | 18,878 | 22,325 | 25,298 | 28,217 | 31,241 |
| SWQ | BUG Rating | B2-U0-G1 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 | B4-U0-G2 | B5-U0-G3 | B5-U0-G3 | B5-U0-G3 | B5-U0-G4 | B5-U0-G4 |
| CI LACI D | Lumens | 2,757 | 5,388 | 8,040 | 10,623 | 13,162 | 15,751 | 18,627 | 21,105 | 23,543 | 26,068 |
| SLL/SLR | BUG Rating | B1-U0-G1 | B1-U0-G2 | B1-U0-G2 | B1-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G3 | B2-U0-G4 | B3-U0-G4 | B3-U0-G4 |
| RW | Lumens | 3,207 | 6,267 | 9,351 | 12,356 | 15,309 | 18,320 | 21,666 | 24,549 | 27,384 | 30,319 |
| D19 | BUG Rating | B2-U0-G1 | B3-U0-G1 | B3-U0-G1 | B3-U0-G2 | B4-U0-G2 | B4-U0-G2 | 84-U0-G2 | B4-U0-G2 | B4-U0-G2 | B5-U0-G3 |
| AFL | Lumens | 3,219 | 6,290 | 9,385 | 12,401 | 15,365 | 18,387 | 21,745 | 24,638 | 27,484 | 30,429 |
| AFL | BUG Rating | B1-U0-G1 | B1-U0-G1 | B1-U0-G1 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B2-U0-G2 | B3-U0-G2 | B3-U0-G3 | B3-U0-G3 |

^{*} Nominal data for 4000K CCT.

LUMEN MULTIPLIER

| Ambient Temperature | Luman Multiplier |
|------------------------|------------------|
| 0°C | 1.02 |
| 10°C | 1.01 |
| 25°C | 1.00 |
| 40°C | 0.99 |
| 50°C | 0.97 |

| Amblent Temperature | TM-21 Lumen Maintenance (60,000 Hours) | Theoretical L70 (Hours) |
|------------------------|--|----------------------------|
| 25°C | > 94% | > 350,000 |
| 40°C | > 93% | > 250,000 |
| 50°C° | > 90% | > 170,000 |

 ^{50°}C lumen maintenance data applies to 530mA and 700mA drive currents.



| Product Family 1 | Light Engine | Number of Light Squares ² | Lamp Туре | Voltage | Distribution | | Color | Mounting |
|--|--|--|--|--|--|---|--|---|
| GLEON≖Galleon | AE=1A Drive Current | 01=1 02=2 03=3 04=4 05=5 06=6 07=7 08=8 09=9 10=10 | LED⇒Solld State Light Emitting Diodes | E1=120-277V 347=347V ³ 480=480V ^{3,4} | T4W=Type I 5NQ=Type I 5MQ=Type I 5WQ=Type II SL3=Type II SL4=Type II SLL=90° Spi SLR=90° Sp RW=Rectang | I Roadway IV Forward Throw IV Wide | AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White | (Blank)=Arm for Round or Square Pole EA=Extended Arm³ MA≖Mast Arm Adapter ° WM=Wall Mount |
| Options (Add as S | uffix) | | | | | Accessories (Order Sepa | rately) | |
| FF=Double Fuse (2 P=Button Type Ph PER7=NEMA 7-PiN R=NEMA T-PiN R=NEMA Twistloci HA-50°C High Am MS/DIM-L09=Moti MS/DIM-L20=Moti MS/DIM-L409=Moti MS/Z-L08=Bi-Leve MS/X-L409-Bi-Leve MS/X-L40W=M-Leve MS/X-L40W=M-Leve MS-L08=Motion Sc MS-L20=Motion Sc | Ce (19 Ce)(19 Ce (19 Ce)(19 Ce | omA nat Specify Voltage Must Specify Voltage Must Specify Voltage 8, 240 or 277V) control Receptacle remains Operation, 5 mming Operation, 6 mming Operation, Maximum 8 1-40 Mounting 10 mming Operation, Maximum Operation, 9 1-20 Operation, 21 -40 sor, Wide Lens for Wide Lens for | Maximum 8' Mounting 9' - 20' Mounting Heigh 1' - 40' Mounting Heigh 1, 21' - 40' Mounting He ting Height ^{13, 14, 15, 16, 12} ; leight ^{13, 14, 15, 18, 18, 18} | ₁₁ 13, 14, 15, 16, 17 ht 13, 14, 13, 14, 19 iight (Wide Rang 11, 14, 12, 14, 28, 21 13, 14, 18, 14, 17 5, 16, 19 15, 16, 19 11, 14, 18, 14, 17 15, 16, 19 | je) 13, 14, 18, 18, 28 | OA/RA1027=NEMA Phot OA/RA1013=Photocontro OA/RA1013=Photocontro OA/RA1013=Photocontro OA/RA1013=Photocontro OA/RA1013=Photocontro OA/RA1013=Photocontro MA1252=10kV Surge Mo MA1036-XX=2@180* Ten MA1193-XX=2@90* Ten MA1193-XX=2@90* Ten MA1038-XX=Single Tenc MA1038-XX=Single Tenc MA1038-XX=3@90* Tenc MA1193-XX=4@90* Tenc MA1193-XX=4@90* Tenc MA1193-XX=4@90* Tenc MA1193-XX=3@90* Tenc GEON-MT1=Field Install GLEON-MT2=Field Install GLEON-MT3=Field Install | ocontrol - 347V old Shorting Cap control dule Repiacement on Adapter for 2-3/8" O.D. on Adapter for 3-1/2" O.D | Tenon . Tenon . Tenon Tenon Tenon Tenon Tenon . Tenon |

NOTES:

HSS=Factory Installed House Side Shield*

- NUIES:
 1. Designitipits Consortium⁵ Qualified. Refer to www designlights org Qualified Products List under Femily Models for details.
 2. Standard 4000K CCT and minimum 70 CRI.
 3. Requires the use of a step down transformer when combined with MS/DIM, MS/X or DIMRF.
 4. Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, Impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
 5. May be required when two or more luminaires are oriented on a 90° or 120° drilling pattern, Refer to arm mounting requirement table.
 6. Fectory Centralist.

CE=CE Marking 25

- 8. Fectory Installed.
 2.1. Is not available with MS, MS/X or MS/DIM at 347V or 480V. 2.1. In AE-02 through AE-04 requires a larger housing, normally used for AE-05 or AE-06. Extended arm option may be required when mounting two or more fixtures per pole at 90° or 120°. Refer to arm mounting requirement table.
 8. Not available with LumaWatt wireless sensors.
 8. Extended lead times apply. Use dedicated IES files for 3000K and 6000K when performing layouts. These files are published on the Galleon luminaire product page on the websits.
 10. Extended lead times apply. For 8030, factor 7030 IES files x 92 (8% luman loss). For 7050, use 7060 IES files.
 11. I Amp standard. Use dedicated IES files for \$30mA and 700mA when performing layouts. These files are published on the Galleon fuminaire product page on the websits.
 13. Consult factory for more information.

TH=Tool-less Door Hardware
LCF=Light Square Trim Plate Painted to Match Housing ²²

14. Utilized internal step down transformer when 347V or 480V is selected.

15. The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Eaton for more information.

16. Not available with HA option.

Specifications and

dimensions subject to

change without notice

- 16. Not available with HA option.
 17. Approximately 2d detection diameter at 8" mounting height.
 18. Approximately 40" detection diameter at 40" mounting height.
 19. Approximately 60" detection diameter at 40" mounting height.
 20. Approximately 60" detection diameter at 40" mounting height.
 21. Approximately 100" detection diameter at 40" mounting height.
 21. Approximately 100" detection diameter at 40" mounting height.
 21. Approximately 100" detection diameter at 40" mounting height.
 21. Approximately 100" detection diameter at 40" mounting height.
 21. Approximately 100" detection diameter at 40" mounting height.
 21. Approximately 100" detection diameter at 40" mounting height.
 21. Approximately 100" detection diameter at 40" mounting height.
 21. Approximately 20" detection diameter at 40" mounting height.
 22. LymaNart with local diameter at 40" mounting height.
 23. Not available with house added an experiment of the proximate application information.
 24. Only for use with 51. \$1.3. \$1.4 and Ap. El. distributions. The label Source stem of the proximate application information.

- 24. Only for use with SL2, SL3, SL4 and AFL distributions. The Light Square trim plate is painted black when the HSS option is selected.

 25. CE is not available with the DIMRE, MS,MS/DIM, F, FE, P, R or PER7 options.

 26. This tool enables adjustment of parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Eaton for more information.

 27. One required for each Light Square.



DESCRIPTION

The patented Lumark Crosstour™ MAXX LED Wall Pack Series of luminaries provides low-profile architectural style with super bright, energy-efficient LEDs. The rugged die-cast aluminum construction, back box with secure lock hinges, stainless steel hardware along with a sealed and gasketed optical compartment make Crosstour impervious to contaminants. The Crosstour MAXX wall luminaire is ideal for wall/ surface, inverted mount for facade/canopy illumination, perimeter and site lighting. Typical applications include pedestrian walkways, building entrances, multi-use facilities, industrial facilities, perimeter parking areas, storage facilities, institutions, schools and loading docks.

| Catalog # | XTOR9A | Туре |
|-------------|---------------|---------|
| Project | PINNACLE PETS | WP1 |
| Comments | | Date |
| Prepared by | , | 9/24/15 |

SPECIFICATION FEATURES

Construction

Low-profile LED design with rugged one-piece, die-cast aluminum back box and hinged removable door. Matching housing styles incorporate both a full cutoff and refractive lens design. Full cutoff and refractive lens models are available in 41W and 79W. Patent pending secure lock hinge feature allows for safe and easy tool-less electrical connections with the supplied push-in connectors. Back box includes four 1/2" NPT threaded conduit entry points. The back box is secured by four lag bolts (supplied by others). External fin design extracts heat from the fixture surface. One-piece silicone gasket seals door and back box. Not recommended for car wash applications.

Optical

Silicone sealed optical LED chamber incorporates a custom engineered reflector providing high-efficiency illumination. Full cutoff models integrate an impact-resistant molded refractive prism optical lens assembly meeting requirements for Dark Sky compliance. Refractive lens models incorporate a molded lens assembly designed for maximum

forward throw. Solid state LED Crosstour luminaries are thermally optimized with two lumen packages in cool 5000K or neutral warm 3500K LED color temperature (CCT).

Electrical

LED driver is mounted to the die-cast aluminum housing for optimal heat sinking, LED thermal management system incorporates both conduction and natural convection to transfer heat rapidly away from the LED source. 41W and 79W models operate in -40°C to 40°C [-40°F to 104°F]. High ambient 50°C [122°F] models available. Crosstour MAXX luminaires maintain greater than 90% of initial light output after 72,000 hours of operation. Four half-inch NPT threaded conduit entry points allow for thru-branch wiring. Back box is an authorized electrical wiring compartment. Integral LED electronic driver incorporates surge protection. 120-277V 50/60Hz, 480V 60Hz, or 347V 60Hz electrical operation, 480V is compatible for use with 480V Wye systems only.

Emergency Egrese Optional integral cold weather

battery emergency egress includes emergency operation test switch, an AC-ON indicator light and a premium extended rated sealed maintenance-free nickel-metal hydride battery pack. The separate emergency lighting LEDs are wired to provide redundant emergency lighting. Listed to UL Standard 924, Emergency Lighting.

Area and Site Pole Mounting Optional extruded aluminum 6-1/2" erm features internal bolt guides for supplied twin support rods, allowing for easy positioning of the fixture during installation to pole. Supplied with round plate adapter plate. Optional tenon adapter fits 2-3/8" or 3-1/2" O.D. Tenon.

Finish

Crosstour MAXX is protected with a super TGIC carbon bronze or summit white polyester powder coat paint. Super TGIC powder coat paint finishes withstand extreme climate conditions while providing optimal color and gloss retention of the installed life.

Warranty Five-year warranty.



Lumark



XTOR CROSSTOUR RECEIVED MAXX LED

3 2015

SEP 2

8

GC PLANNIN

APPLICATIONS:



WALL / SURFACE INVERTED OMMISSION SITELIGHTING

CERTIFICATION DATA

UL/cUL Wet Location Listed LM79 / LM80 Compilant **ROHS Compliant** NOM Compliant Models 3G Vibration Tested UL924 Listed (CBP Models) IP66 Reted DasignLights Consortium@ Qualified*

TECHNICAL DATA

40°C Ambient Temperatura External Supply Wiring 90°C Minimum

Effective Projected Area (Sq. Ft.): XTOR5A/XTOR9A=0.54 With Pole Mount Arm=0.98

SHIPPING DATA: Approximate Net Weight: 12-15 lbs. [5,4-8.8 kgs.]

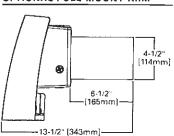
DIMENSIONS

FULL CUTOFF [279mm]

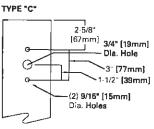
DEEP BACK BOX

REFRACTIVE LENS DEEP BACK BOX [279mm] 8-3/4 -J152mml 1222mm

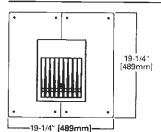
OPTIONAL POLE MOUNT ARM







ESCUTCHEON PLATES





| LED Information | XTOR5A | XTOR5ARL | XTOR5A-N | XTOR5ARL-N |
|--------------------------------|----------|----------|----------|---------------|
| Delivered Lumens | 4,409 | 4,831 | 4,136 | 3,744 |
| B.U.G. Rating | B1-U0-G1 | B1-U0-G2 | B1-U0-G1 | B1-U0-G2 |
| CCT (Kalvin) | 5000K | 5000K | 3500K | 350 0K |
| CRI (Color Rendering Index) | 65 | 65 | 70 | 70 |
| Power Consumption (Watts) | 41W | 41W | 43W | 42 W |

| LED Information | XTOR9A | XTORSARL | N-APROTX | XTOR9ARL-N |
|--------------------------------|----------|----------|----------|------------|
| Delivered Lumena | 7,079 | 7,367 | 6,468 | 6,036 |
| B.U.G. Rating | B1-U0-G1 | B1-U0-G2 | 81-U0-G1 | B1-U0-G2 |
| CCT (Kelvin) | 5000K | 5000K | 3500K | 3500K |
| CRI (Color Rendering Index) | 65 | 65 | 70 | 70 |
| Power Consumption (Watts) | 79W | 82W | 79W | 81W |

| EGRESS Information | XTORSA and XTORSA Full Cutoff CBP Egrass LED | XTORSA and XTOR9A Refractive Lens CBP Egress LED |
|--------------------------------|---|---|
| Delivered Lumens | 509 | 468 |
| B.U.G. Rating | N.A. | N.A. |
| CCT (Kelvin) | 4000K | 4000K |
| CRI (Color Rendering Index) | 65 | 65 |
| Power Consumption (Watts) | 1.8W | 1.8W |

CURRENT DRAW

| | Model Series | | | | | | |
|---------|--------------|--------|---------------------------------|---------------------------------|--|--|--|
| Voltage | XTOR5A | XTOR9A | XTORSA-CBP (Fixture/Battery) | XTOR9A-CBP (Fixture/Battery) | | | |
| 120V | 0.35 | 0.67 | 0.60/0.25 | 0.92/0.25 | | | |
| 208V | 0.20 | 0.39 | | •• | | | |
| 240V | 0.18 | 0.34 | | | | | |
| 277∨ | 0.15 | 0.29 | 0.36/0,21 | 0.50/0.21 | | | |
| 347V | 0.14 | 0.26 | | | | | |
| 480V | 0.10 | 0.19 | | | | | |

| Amblent Temperature | TM-21 Lumen Maintenance (72,000 Hours) | Theoretical L70 (Hours) |
|------------------------|---|----------------------------|
| XTORSA Mod | el | |
| 25°C | > 92% | > 290,000 |
| 40°C | > 91% | > 290,000 |
| 50°C | > 89% | > 250,000 |
| XTORSA Mod | ol . | - |
| 25°C | > 91% | > 260,000 |
| 40°C | > 90% | > 230,000 |
| 50°C | > 82% | > 130,000 |



Sample Number: XTOR5A-N-WT-PC1

| Series t | LED Kelvin Color | Housing Color | Options (Add as Suffix) |
|---|------------------|--|--|
| Full Cutoff XTOR5A=41W XTOR9A=79W Refractive Lens XTOR9ARL=41W XTOR9ARL=79W Accessories (Order Separately) | | [Blank]=Carbon Bronze (Stendard) WT=Summit White | 347V=347V-3.4.1 480V=480V-3.4.1.6 PC1=Photocontrol 120V 7 PC2=Photocontrol 208-277V 7.6 DIM=0-10V Dimming Driver ? PMa=Pole Mount Arm (C Orilling) with Round Adapter 1 HA=50°C High Amblent 3 MS-L20=Motion Sensor for ON/OFF Operation 2.8.8.13 MS/DIM-L20=Motion Sensor for Dimming Operation 2.8.8.13 CBP=Cold Weather Battery Pack 2.8.18.13 |
| WG-XTORMX=Crosstour I PB120V=Field Installed 12 PB277V BUTTON PC=Field VA1040-XX=Single Tenon VA1041-XX=2@180* Teno VA1042-XX=3@120* Tenon VA1043-XX=4@90* Tenon VA1044-XX=2@90* Tenon | MAXX Wire Guard | VA1046-XX=2@120" Tenon Adapter for VA1033-XX=Single Tenon Adapter for VA1033-XX=2@180" Tenon Adapter for VA1035-XX=3@120" Tenon Adapter for VA1037-XX=2@90" Tenon Adapter for VA1037-XX=2@90" Tenon Adapter for VA1038-XX=3@90" Tenon Adapter for VA1038-XX=2@120" Tenon Adapter for VA1039-XX=2@120" Tenon Adapter for VA1039-XX=2@100" Tenon Adapter for VA100" Tenon Adapter for VA100" Tenon Adapter for VA100" Tenon Adapter for VA100" Tenon A | 2-3/8" O.D. Tenon ¹⁴ or 2-3/8" O.D. Tenon ¹⁴ or 2-3/8" O.D. Tenon ¹⁴ r 2-3/8" O.D. Tenon ¹⁴ or 2-3/8" O.D. Tenon ¹⁴ or 2-3/8" O.D. Tenon ¹⁴ or 2-3/8" O.D. Tenon ¹⁴ |

NOTES: 1 DesignLights Consordium® Qualified, Refer to www.designlights.org Qualified Products List under Family Models for details, 2 Not available with HA option. 3 Deep back box is standard for 347V, 480V, CBP, PMA, MS-L20 and MS/DIM-L20. 4 Not available with CBP option. 5 Thru-branch wiring not available with HA option or with 347V, 6 Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or comer grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems). 7 Not available with MS-L20 and MS/DIM-L20 options. 8 Use PC2 with 347V or 480V option for photocomrol. Factory wired to 208-277V lead. 9 For use in downlight orientation only. Optimal coverage at mounting heights of 9°-20° 10 120V or 277V only. 11 Factory set to 50% power reduction after 15-minutes of inactivity. Dimming driver included. 12 Includes integral photo sensor. 13 Operating temperatures -20°C to 25°C. 14 Repisce XX with CB for carbon bronze or WT for summit whits.

STOCK ORDERING INFORMATION

| 41W Series | 79W Series | |
|---|--|--|
| Full Cutoff | | |
| XTOR5A=41W, 5000K, Carbon Bronze | XTOR9A=79W, 5000K, Carbon Bronze | |
| XTOR5A-PC1=41W, 5000K, 120V PC, Carbon Bronze | XTOR9A-PC1=79W, 5000K, 120V PC, Carbon Bronze | |
| XTOR5A-WT= 41W, 5000K, Summit White | XTOR9A-WT=79W, 5000K, Summit White | |
| XTORSA-N=41W, 3500K, Carbon Bronze | XTOR9A-PC2=79W, 5000K, 208-277V PC, Carbon Bronze | |
| | XTOR9A-480V=79W, 5000K, 480V, Carbon Bronze | |
| | XTOR9A-PMA=79W, 5000K, Pole Mount Arm, Carbon Bronze | |
| Refractive Lens | | |
| XTOR5ARL=41W, 5000K, Refractive Lens, Carbon Branze | XTOR9ARL=79W, 5000K, Refractive Lens, Carbon Bronze | |
| XTOR5ARLPC1=41W, 5000K, Refractive Lens, 120V PC, Carbon Bronze | XTOR9ARL-PC1=79W, 5000K, Refractive Lens, 120V PC, Carbon Bronze | |
| XTOR5ARL-WT=41W, 5000K, Refractive Lens, SummitWhite | XTOR9ARLWT=79W, 5000K, Refractive Lens, Summit White | |
| XTOR5ARL-N=41W, 3500K, Refractive Lens, Carbon Bronze | XTOR9ARL-PC2=79W, 5000K, Refractive Lens, 208-277V PC, Carbon Bronze | |
| | XTOR9ARL-480V=79W, 5000K, Refractive Lens, 480V, Carbon Bronze | |
| | XTOR9ARLPMA=79W, 5000K, Refractive Lens, Pole Mount Arm, Carbon Bronze | |

5-DAY QUICK SHIP ORDERING INFORMATION

| 41W Sories | 79W Series |
|--|--|
| Full Cutoff | |
| XTOR5A-CBP=41W, 5000K, Carbon Bronze, Cold Weather Battery Pack | XTOR9A-CBP=79W, 5000K, Carbon Bronze, Cold Weather Battery Pack |
| XTOR5A-480V⇒41W, 5000K, Carbon Bronze, 480V | XTOR9A-N=79W, 3500K, Carbon Bronze |
| XTOR5A-PC2=41W, 5000K, Carbon Bronze, 208-277V PC | |
| Refractive Lens | |
| XTOR5ARL-PC2=41W, Refractive Lens, 5000K, Carbon Bronze, 208-277V PC | XTOR9ARL-CBP=79W, Refractive Lens, 5000K, Carbon Bronze, Cold Weather Battery Pack |
| XTOR5ARL-CBP=41W, Refractive Lens, 5000K, Carbon Bronze, Cold Weather Battery Pack | XTOR9ARL-N=79W, Refractive Lens, 3500K, Carbon Bronze |
| XTOR5ARL-480V=41W, Refractive Lens, 5000K, Carbon Bronze, 480V | |



| FINISH SCHEDULE | | |
|------------------------|---------------------------|---|
| DESCRIPTION | MANUFACTURER | COLOR/TEXTURE |
| SPEC BRIK | OBERFIELDS | 2015 HOUSTON BLEND |
| CONCRETE BLOCK | OBERFIELDS | COLOSSAL BLOK GRAPHITE, SMOOTH/SPLITFACE |
| METAL WALL PANEL | VARCO PRUDEN BUILDINGS | COOL GRANITE GRAY |
| METAL ROOF PANEL | VARCO PRUDEN BUILDINGS | GALVALUME |
| METAL TRIM | VARCO PRUDEN BUILDINGS | COOL ZINC GRAY |
| GUTTER/ DOWN SPOUT | VARCO PRUDEN BUILDINGS | COOL ZINC GRAY |
| ALUMINUM STOREFRONT | | CLEAR ANODIZED ALUMINUM WITH 1" INSULATED TINTED GLAZING |
| ACCENT PAINT | TO MATCH SHERWIN WILLIAMS | SW 6580 CERISE |
| FENCE | SIMTEK | ECOSTONE PLUS, GRAY 4'-0" x 8'-0" PANEL |
| | | |









